

(FILE 'HOME' ENTERED AT 16:11:03 ON 09 AUG 2007)

FILE 'REGISTRY' ENTERED AT 16:14:38 ON 09 AUG 2007

L1 STRUCTURE UPLOADED
L2 4 S L1 SSS SAM
L3 68 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:15:17 ON 09 AUG 2007

L4 21 S L3
L5 415133 S VIRUS OR ANTIVIRAL OR HIV
L6 4 S L4 AND L5
E SPERM+ALL/CT

=> s l4 not l6
L7 17 L4 NOT L6

=> s sperm?
L8 77500 SPERM?

=> s l8 an dl4
MISSING OPERATOR L8 AN
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l8 and l4
L9 4 L8 AND L4

=> s l9 not l6
L10 0 L9 NOT L6

=> s vag?
L11 43957 VAG?

=> s l11 and l4
L12 2 L11 AND L4

=> s l12 not l6
L13 0 L12 NOT L6

=> d l7 ibib abs hitstr 1-17

=> d 17 ibib abs hitstr 1-17

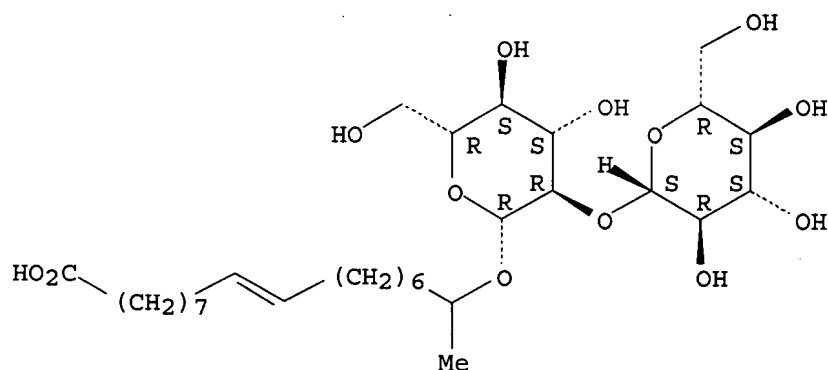
L7 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2007:703781 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 147:116578
 TITLE: Sophorolipids as protein inducers and inhibitors in fermentation medium
 INVENTOR(S): Gross, Richard A.; Shah, Vishal; Nerud, Frantisek; Madamwars, Datta
 PATENT ASSIGNEE(S): Polytechnic University, USA
 SOURCE: PCT Int. Appl., 12pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007073371	A1	20070628	WO 2005-US46457	20051222
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			WO 2005-US46457	20051222

AB A method for producing sophorolipids having protein inducer and/or repressor activities having the steps of synthesizing the sophorolipid by fermentation of *Candida bombicola* in a fermentation media to form a natural mixture of lactonic sophorolipids and non-lactonic sophorolipids and then utilizing the natural mixture as a protein inducing agent, utilizing the natural mixture as a protein repressing agent, and/or utilizing the natural mixture as a combined protein induction/repressor agent. An application of the sophorolipid compound produced according to the method as a microbial media component.

IT 805250-88-8P 805250-89-9P 942630-33-3P
 942630-34-4P
 RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (sophorolipids as protein inducers and inhibitors in fermentation medium)
 RN 805250-88-8 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

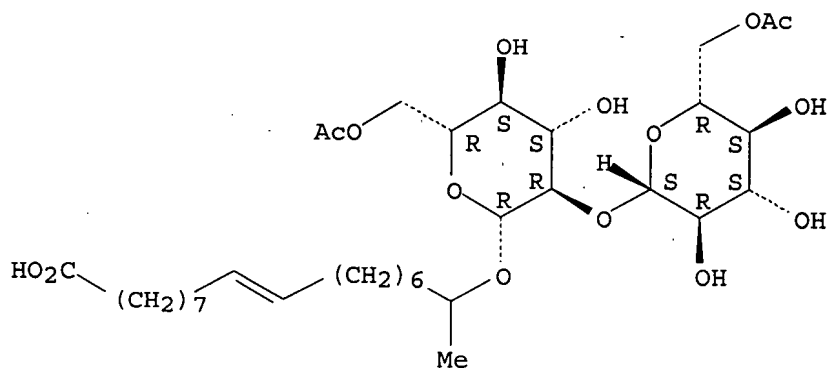


RN 805250-89-9 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

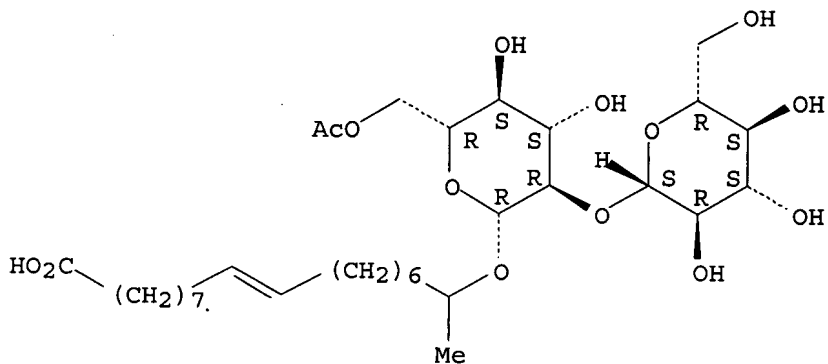


RN 942630-33-3 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

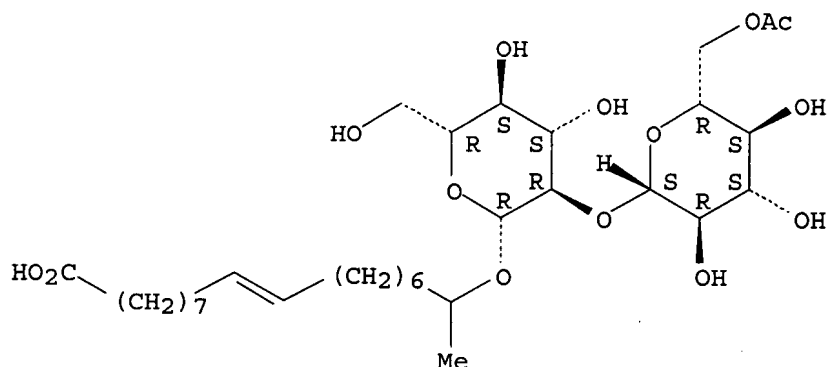
Double bond geometry unknown.



RN 942630-34-4 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

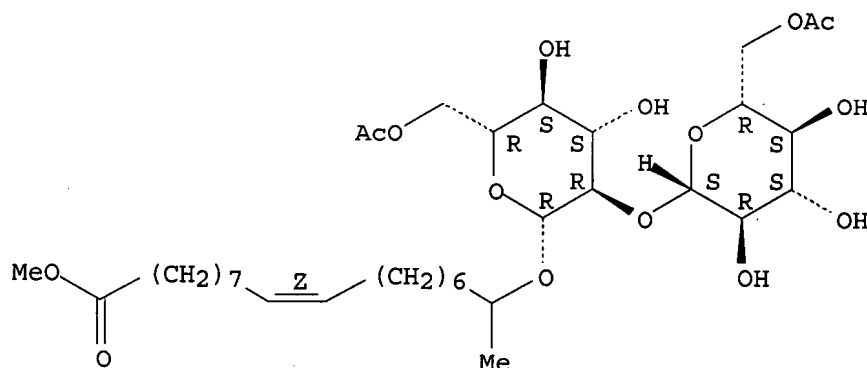
L7 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2005:1143610 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 144:291342
 TITLE: Sophorolipid biosynthesis from a biodiesel co-product stream
 AUTHOR(S): Ashby, Richard D.; Nunez, Alberto; Solaiman, Daniel K. Y.; Foglia, Thomas A.
 CORPORATE SOURCE: Fats, Oils and Animal Coproducts Research Unit, ARS, ERRC, USDA, Wyndmoor, PA, 19038, USA
 SOURCE: Journal of the American Oil Chemists' Society (2005), 82(9), 625-630
 CODEN: JAOCA7; ISSN: 0003-021X
 PUBLISHER: AOCS Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:291342

AB We applied a biodiesel co-product stream (BCS) as a fermentation feedstock for the microbial synthesis of sophorolipids (SL). The BCS was composed of 40% glycerol, 34% hexane-solubles (made up of 92% FA soaps/FAME and 6% MAG/DAG), and 26% water. Batch culture fermns. of the yeast *Candida bombicola* on pure glycerol resulted in low-level synthesis of SL (.apprx.9 g/L). HPLC associated with atmospheric pressure CI-MS (LC/APCI-MS) revealed that the SL derived from pure glycerol had 99% of the FA side chains linked to the 4'' hydroxyl group of the sophorose sugar, resulting in a lactonic structure. In contrast, the use of the BCS as feedstock increased the SL yield to 60 g/L and the open-chain form to 75% including both oleic acid and linoleic acid (along with their Me esters) as the dominant species comprising the side chains. By favoring the open-chain structure, the SL mols. (particularly the FA side chain) can be chemical modified without the need to open a lactone ring first. The ability to use the BCS as a feedstock for SL synthesis will provide an outlet for this residual material, thus helping to stimulate growth in the biodiesel market and the use of agricultural fats and oils from which the biodiesel was synthesized.

IT 821800-26-4P 879012-92-7P
 RL: BMF (Bioindustrial manufacture); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
 (sophorolipid biosynthesis from biodiesel co-product stream)
 RN 821800-26-4 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-

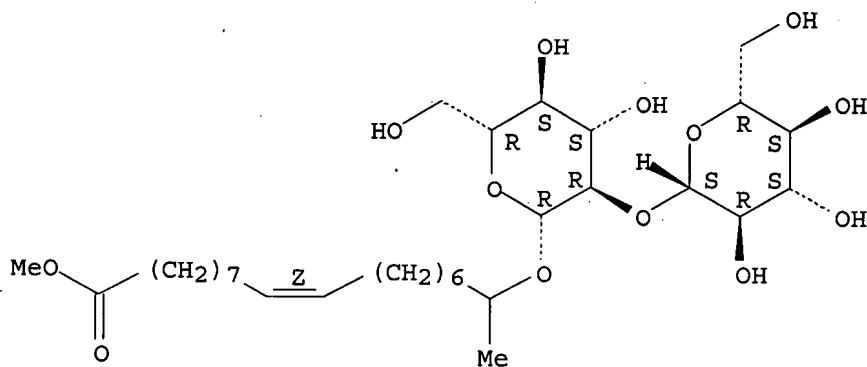
glucopyranosyl)- β -D-glucopyranosyl]oxy]-, methyl ester, (9Z)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 879012-92-7 HCAPLUS
CN 9-Octadecenoic acid, 17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-, methyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1058028 HCAPLUS <<LOGINID::20070809>>
DOCUMENT NUMBER: 142:43453
TITLE: Cosmetic uses of sophorolipids as agents for regulating subcutaneous adipose mass and slimming
INVENTOR(S): Pellicier, Françoise; Andre, Patrice
PATENT ASSIGNEE(S): Lvmh Recherche, Fr.
SOURCE: Fr. Demande, 32 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2855752	A1	20041210	FR 2003-6664	20030603
FR 2855752	B1	20050826		
WO 2004108063	A2	20041216	WO 2004-FR1359	20040602
WO 2004108063	A3	20050127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

FR 2003-6664

A 20030603

OTHER SOURCE(S): MARPAT 142:43453

AB New cosmetic uses of the sophorolipids, as slimming agents stimulating the synthesis of the leptin by the adipocytes are disclosed. The cosmetic compns. contain at least 1 sophorolipid and a lipolytic agent selected from the compds., c-AMP and its derivs. Thus, an emulsion contained polypropylene glycol isoceteth-20 acetate 2, Poloxamer-407 0.50, propylene glycol isoceteth-3 acetate 15, pentacyclomethicone 15, butylene glycol 3, preservative qs, Coleus forskohlii extract 0.1, xanthan gum 0.05, acrylate-C10-30/alkyl acrylate copolymer 0.04, polyacrlamide C13-14 isoparaffin laureth-7 0.50, perfume 0.20, Sopholiance 0.50 and water qs to 100%.

IT 805250-88-8 805250-89-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

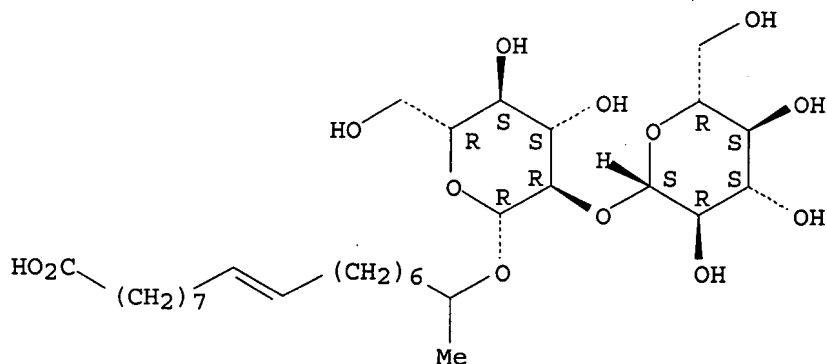
(cosmetic use of sophorolipids as agents for regulating s.c. adipose mass and slimming).

RN 805250-88-8 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

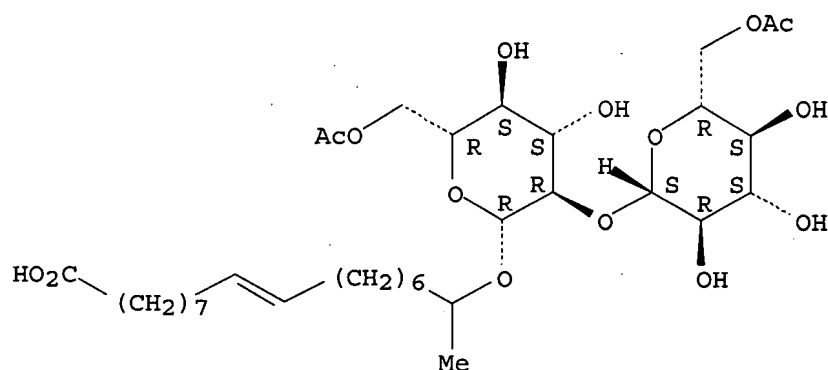


RN 805250-89-9 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:905607 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 141:355428
 TITLE: Treatment and prophylaxis of sepsis and septic shock with sophorolipids
 INVENTOR(S): Gross, Richard A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 10 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004214795	A1	20041028	US 2004-807961	20040324
CA 2557671	A1	20051013	CA 2005-2557671	20050324
WO 2005094268	A2	20051013	WO 2005-US10060	20050324
WO 2005094268	A3	20070426		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
EP 1729782	A2	20061213	EP 2005-730352	20050324
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				

PRIORITY APPLN. INFO.:
 US 2003-457070P P 20030324
 US 2004-807961 A 20040324
 WO 2005-US10060 W 20050324

AB A composition for the prophylaxis or treatment of humans or animals for septic shock and sepsis using a mixture of sophorolipids is disclosed. The in vivo expts. demonstrated that sophorolipids have a protective effect against ongoing endotoxic shock. I.p. injection of sophorolipids 1.5 h after galactosamine-LPS treatment resulted in 53% lower mortality than that observed among pos. control mice.

IT 220608-02-6 220608-11-7 693786-10-6
777091-27-7

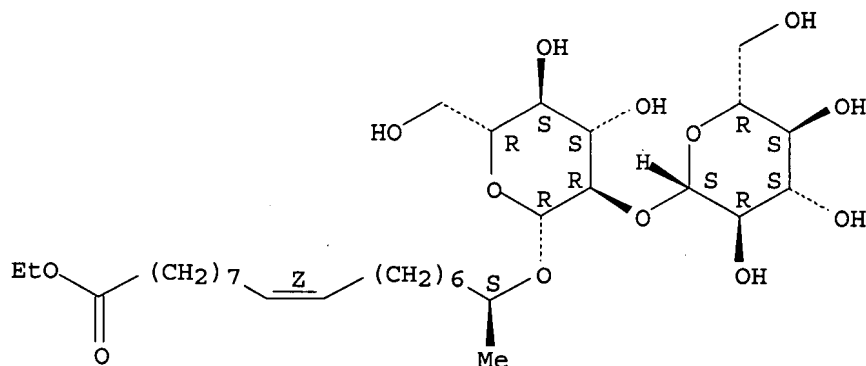
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment and prophylaxis of sepsis and septic shock)

RN 220608-02-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

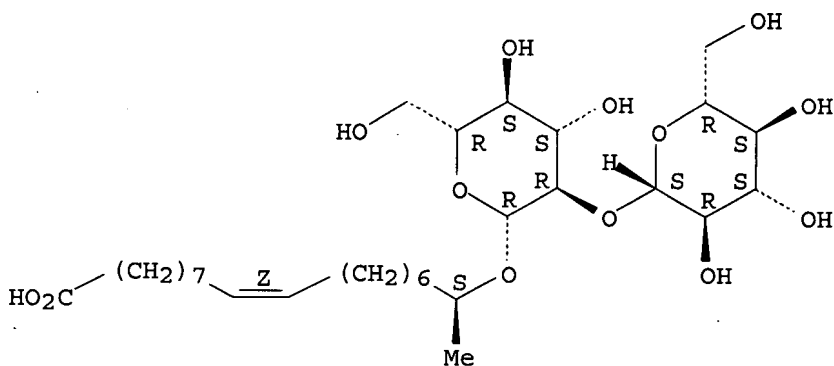


RN 220608-11-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

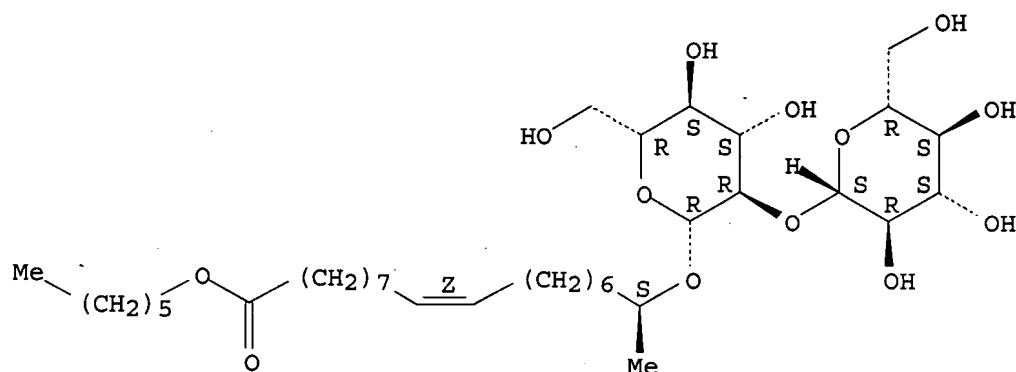


RN 693786-10-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, hexyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

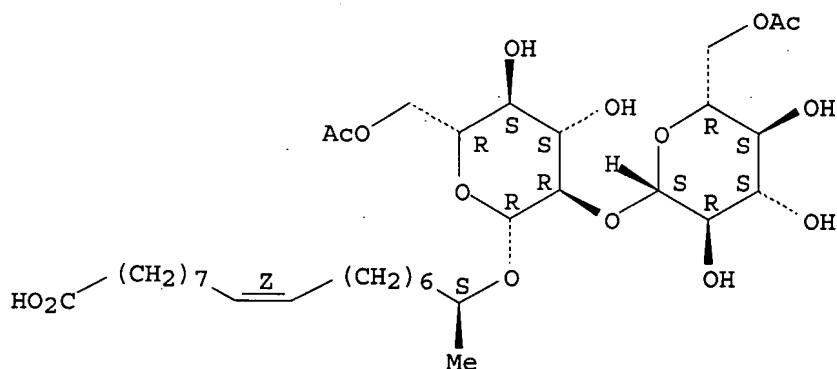
Double bond geometry as shown.



RN 777091-27-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L7 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:603194 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 141:290899

TITLE: Supramolecular Assemblies of a Naturally Derived Sophorolipid

AUTHOR(S): Zhou, Shuiqin; Xu, Chang; Wang, Jun; Gao, Wei; Akhverdiyeva, Rena; Shah, Vishal; Gross, Richard

CORPORATE SOURCE: Department of Chemistry, Institute of Macromolecular Assembly, College of Staten Island, City University of New York, Staten Island, NY, 10314, USA

SOURCE: Langmuir (2004), 20(19), 7926-7932

CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

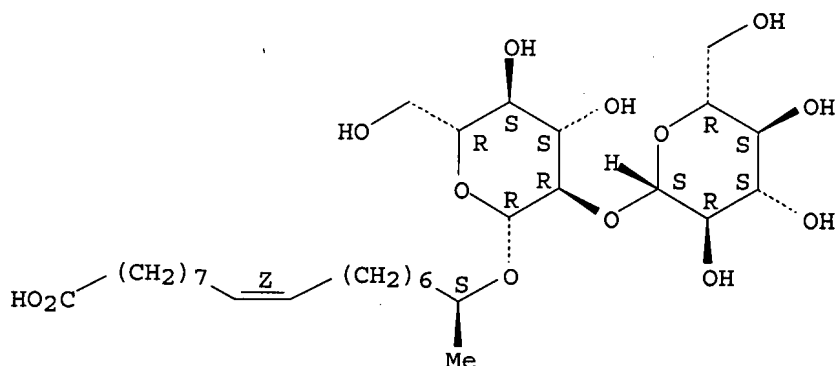
LANGUAGE: English

AB Acidic sophorolipid (SL) mols. derived from yeasts represent a novel type of asym. bolaamphiphiles due to their unique structural features that include an asym. polar head size (disaccharide vs COOH), a kinked hydrophobic core (cis-9-octadecenoic chain), and a non-amide polar-nonpolar linkage. Light microscopy, small- and wide-angle X-ray scattering, FT-IR spectroscopy, and dynamic laser light scattering were used to investigate the supramol. structures of the self-assembled

aggregates of SL mols. at different pH values. In acidic conditions (pH < 5.5), giant twisted and helical ribbons of 5-11 μm width and several hundreds of micrometers length were observed for the first time. Increase in solution pH values slowed ribbon formation, decreased ribbon yield, and increased the helicity and entanglements of the giant ribbons. An interdigitated lamellar packing model of acidic SL-COOH mols. with a long period of 2.78 nm, stabilized by both the strong hydrophobic association between the cis-9-octadecenoic chains and strong disaccharide-disaccharide hydrogen bonding, is proposed. The neutralization of SL-COOH in water to SL-COONa produced clear solns. with the formation of short-range ordered aggregates. At concns. below 1.0 mg/mL, the size of self-assembled aggregates increased as the concentration increased. At concns. above 1.0 mg/mL, narrowly distributed micellar aggregates with a constant hydrodynamic radius (R_h) of about 100 nm are formed. The large micelles show strong angular dependence with the fast mode appearing at scattering angle $\theta \geq 60^\circ$.

IT 220608-11-7
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (supramol. assemblies of naturally derived acidic sophorolipid from *Candida bombicola*)
 RN 220608-11-7 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:500268 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 142:112516
 TITLE: Synthesis and interfacial properties of sophorolipid derivatives
 AUTHOR(S): Zhang, Lei; Somasundaran, P.; Singh, Sanjay K.; Felse, Arthur P.; Gross, Richard
 CORPORATE SOURCE: NSF Industry/University Cooperative Research Center for Advanced Studies on Novel Surfactant, School of Engineering and Applied Sciences, Columbia University, New York, NY, 10027, USA
 SOURCE: Colloids and Surfaces, A: Physicochemical and Engineering Aspects (2004), 240(1-3), 75-82
 CODEN: CPEAEH; ISSN: 0927-7757
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:112516

AB Biosurfactants made by fermentation from renewable resources provide "environmentally friendly" processes and products. A natural sophorolipid mixture was produced by the yeast *Candida bombicola* when cultured on glucose and oleic acid. The sophorolipid mixture was chemical modified to form the corresponding sophorolipid alkyl (Me, Et, Pr, and butyl) esters by reaction with the corresponding sodium alkoxides. Interfacial properties of these surfactants, such as surface tension reduction, aggregation, and adsorption, were systematically studied. It was found that the critical micelle concentration of sophorolipid esters decreases to about 1/2 per addnl. one CH₂ group to the alkyl ester moiety. Interestingly, these surfactants were found to adsorb strongly on alumina but weakly on silica. They have properties that make them attractive candidates for uses in detergents, cosmetics, soil remediation, and enhanced oil recovery.

IT 821800-26-4P 821800-40-2P 821800-54-8P

821800-55-9P 821800-56-0P

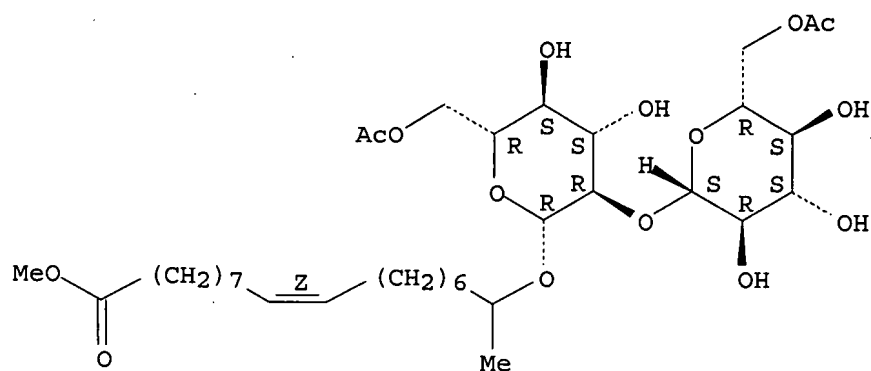
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and interfacial properties of sophorolipid derivs.)

RN 821800-26-4 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, methyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

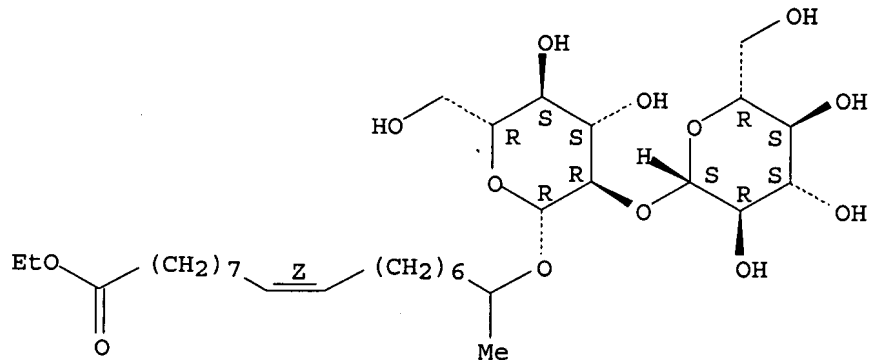


RN 821800-40-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

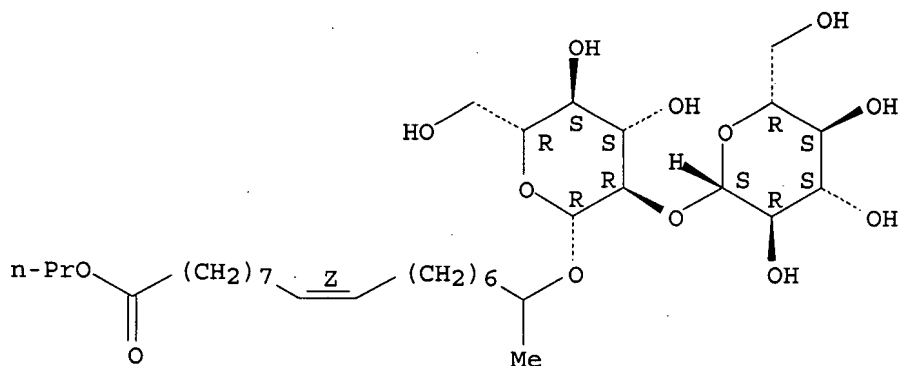


RN 821800-54-8 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, propyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

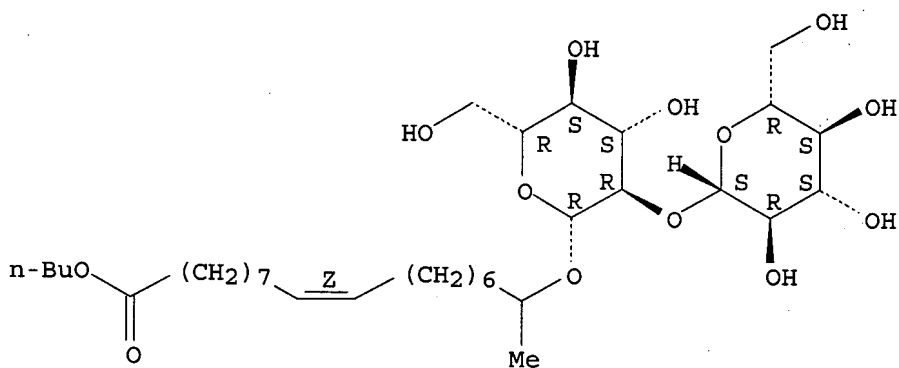


RN 821800-55-9 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, butyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

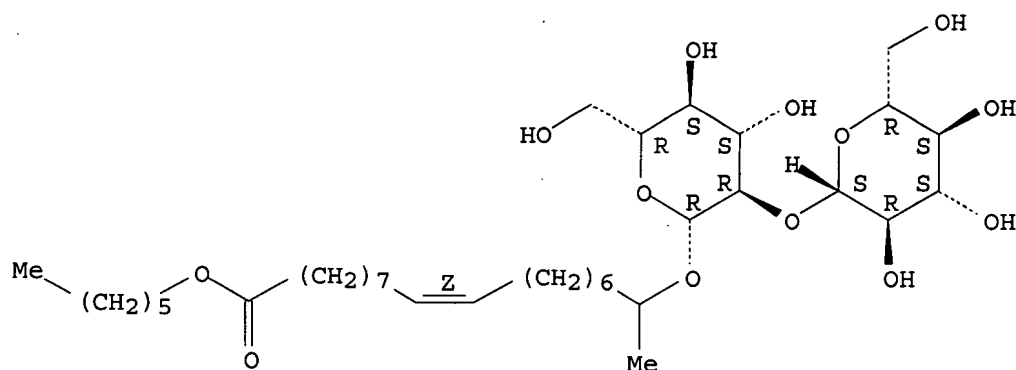


RN 821800-56-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, hexyl ester, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:729051 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 140:2333
 TITLE: Enzyme-catalyzed regioselective transesterification of peracylated sophorolipids
 AUTHOR(S): Carr, Jason A.; Bisht, Kirpal S.
 CORPORATE SOURCE: Department of Chemistry, University of South Florida, Tampa, FL, 33620, USA
 SOURCE: Tetrahedron (2003), 59(39), 7713-7724
 CODEN: TETRAB; ISSN: 0040-4020
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 140:2333

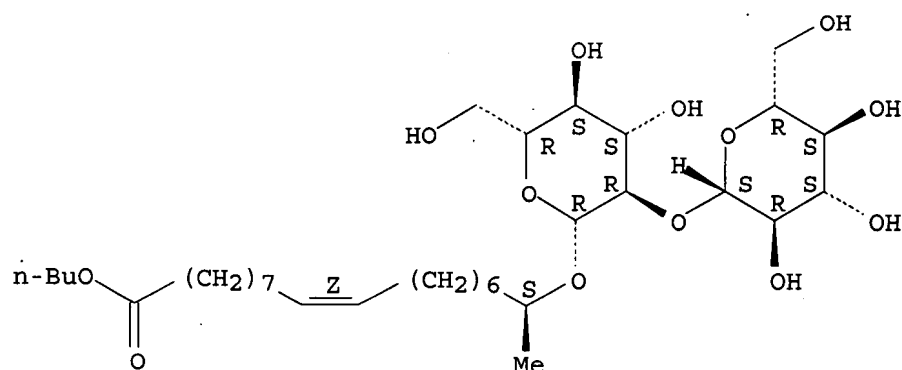
AB Regioselective transesterifications and hydrolysis of peracylated sophorolipid (SL) derivs. catalyzed by lipases was investigated. This study is the first evaluation of the lipase-catalyzed reactions on the non-lactonic SL derivs. Four lipases, namely from porcine pancreas (PPL, Type II), *Candida rugosa* (AYS, TypeVII), *Pseudomonas cepacia* (PS-30), and *Candida antarctica* (Novozym 435, carrier fixed lipase fraction B) were used in anhydrous THF or in phosphate buffer (pH=7.4, 0.2 M). It was confirmed from the detailed spectral anal. of the products that transesterification failed to furnish any free hydroxyls on the sophorose ring. Instead, transesterification took place on the Me ester located at the carboxylic end of the 17-hydroxyoctadecenoic acid chain attached to the C-1' position of the sophorose ring. It is proposed that in absence of the lactonic structural motif, the binding of the peracylated non-lactonic SLs in the lipase binding pocket takes place such that the carboxyl group of the octadecenoic acid, not the sophorose sugar, is preferentially accessible to the active site.

IT 220608-04-8P
 RL: BPN (Biosynthetic preparation); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (lipase-catalyzed regioselective transesterification of peracylated sophorolipids)

RN 220608-04-8 HCAPLUS

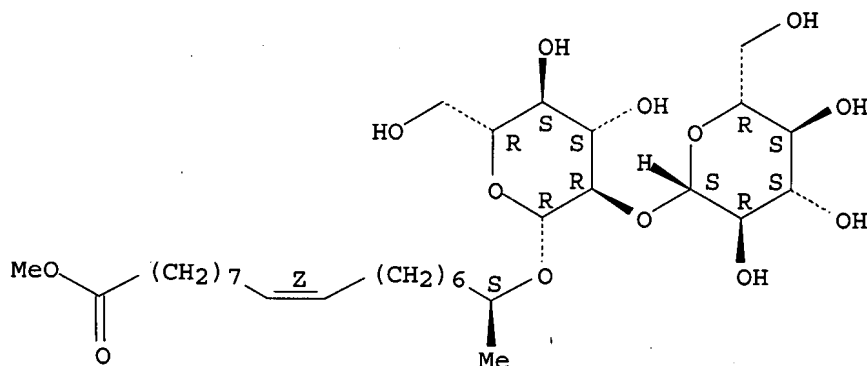
CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, butyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



IT 213754-46-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PRÉP (Preparation); RACT
 (Reactant or reagent)
 (lipase-catalyzed regioselective transesterification of peracylated
 sophorolipids)
 RN 213754-46-2 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-
 glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:577657 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 140:164079
 TITLE: Enzymatic synthesis of a galactopyranose sophorolipid
 fatty acid-ester
 AUTHOR(S): Nunez, Alberto; Foglia, Thomas A.; Ashby, Richard
 CORPORATE SOURCE: Eastern Regional Research Center, US Department of
 Agriculture, Fats, Oils and Animal Coproducts Research
 Unit, Agricultural Research Service, Wyndmoor, PA,
 19038, USA
 SOURCE: Biotechnology Letters (2003), 25(16), 1291-1297
 CODEN: BILED3; ISSN: 0141-5492
 PUBLISHER: Kluwer Academic Publishers
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 140:164079

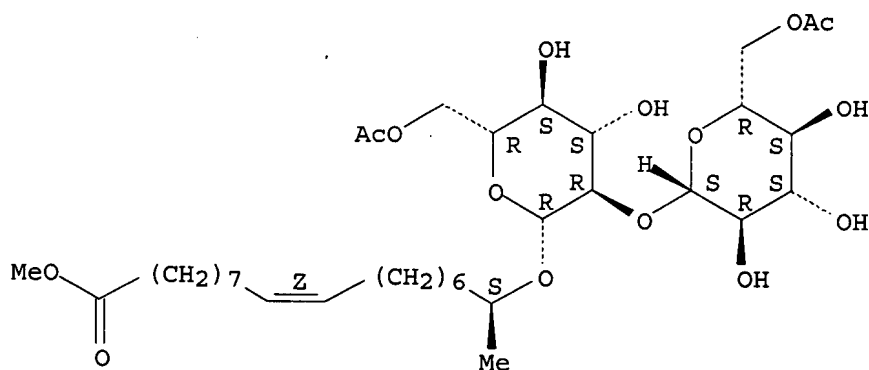
AB Sophorolipid lactones produced by *Candida bombicola* were deacetylated and ring opened with sodium methoxide to their corresponding Me esters. The Me esters, after re-acetylation with vinyl acetate using an immobilized lipase, were transesterified with 1,2-3,4-di-O-isopropylidene-d-galactopyranose in THF using the same lipase catalyst. The di-O-isopropylidene sophorolipid sugar esters were hydrolyzed to give the galactopyranose sophorolipid esters as the final products.

IT 220608-06-0P 655232-87-4P 655232-90-9P
655232-91-0P 655232-92-1P 655232-94-3P
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(enzymic preparation of galactopyranose sophorolipid esters)

RN 220608-06-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

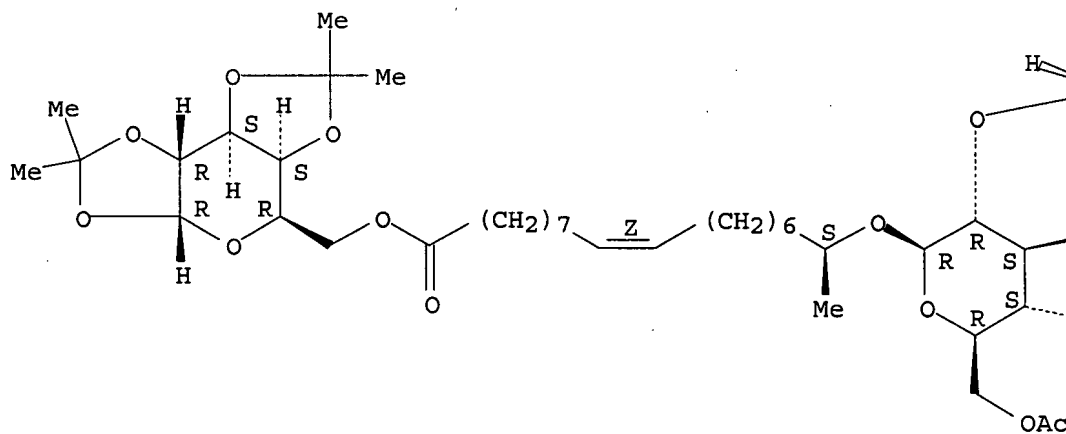


RN 655232-87-4 HCAPLUS

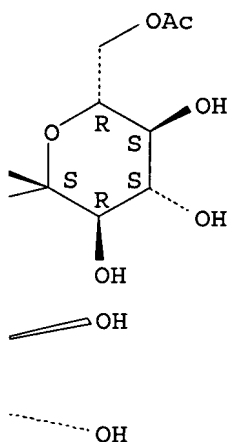
CN α -D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-, (9Z,17S)-17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



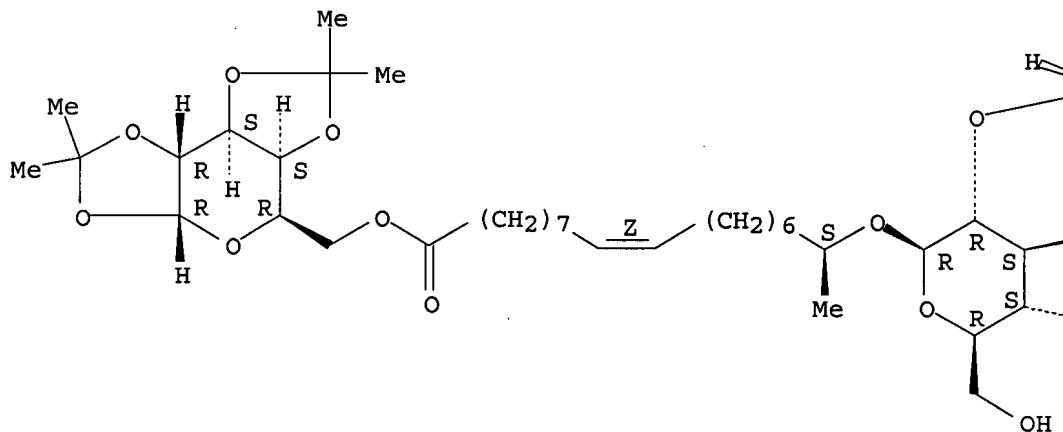
PAGE 1-B



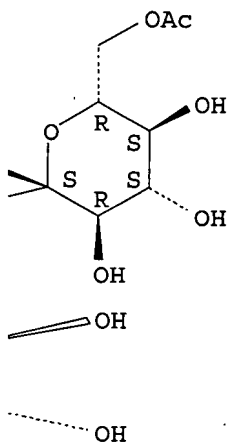
RN 655232-90-9 HCAPLUS
 CN α-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-,
 (9Z,17S)-17-[[2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-
 glucopyranosyl]oxy]-9-octadecenoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



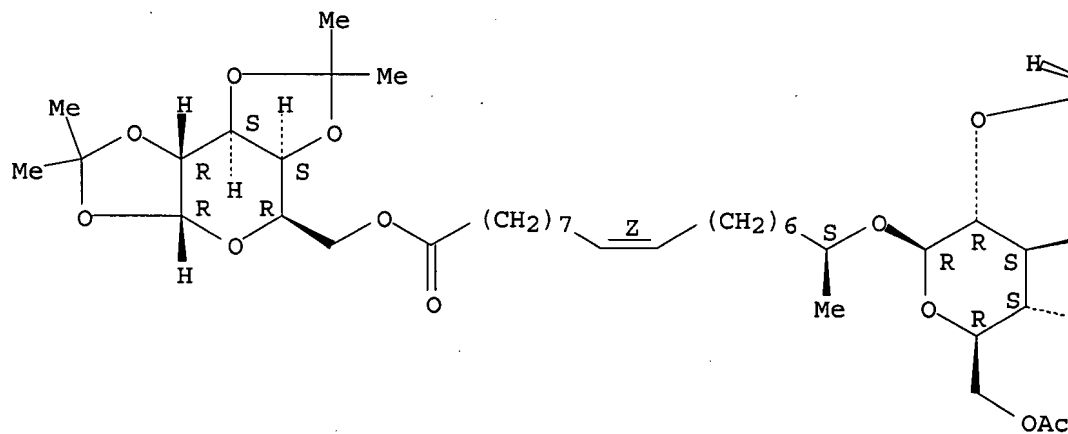
PAGE 1-B



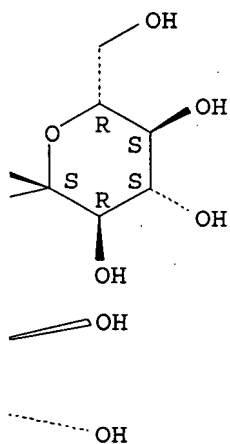
RN 655232-91-0 HCAPLUS
 CN α-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-,
 (9Z,17S)-17-[(6-O-acetyl-2-O-β-D-glucopyranosyl-β-D-
 glucopyranosyl)oxy]-9-octadecenoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



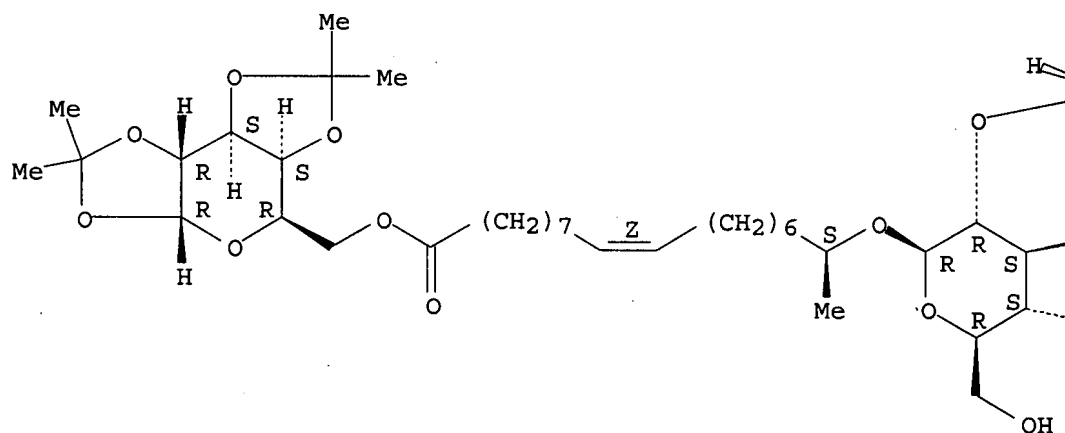
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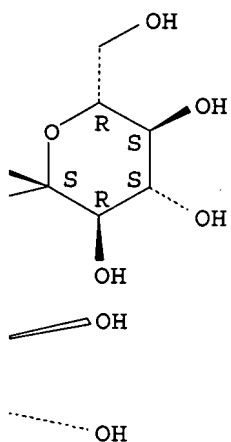
RN 655232-92-1 HCAPLUS
 CN α-D-Galactopyranose, 1,2:3,4-bis-O-(1-methylethylidene)-,
 (9Z,17S)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-9-
 octadecenoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

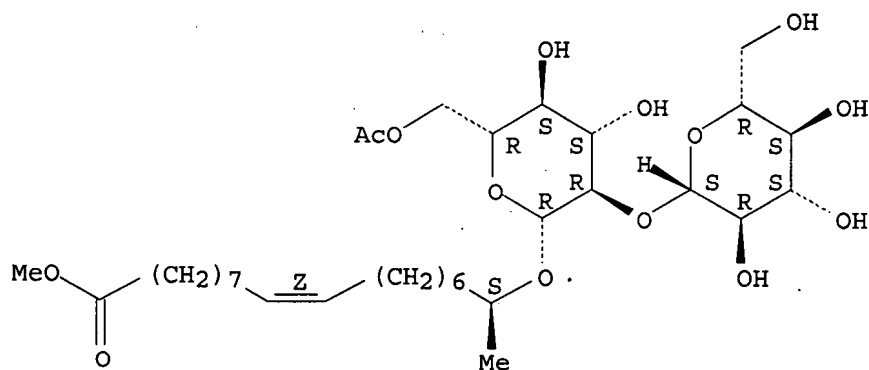


RN 655232-94-3 HCAPLUS

CN 9-Octadecenoic acid, 17-[(6-O-acetyl-2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 655232-89-6P

RL: BPN (Biosynthetic preparation); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(enzymic preparation of galactopyranose sophorolipid esters)

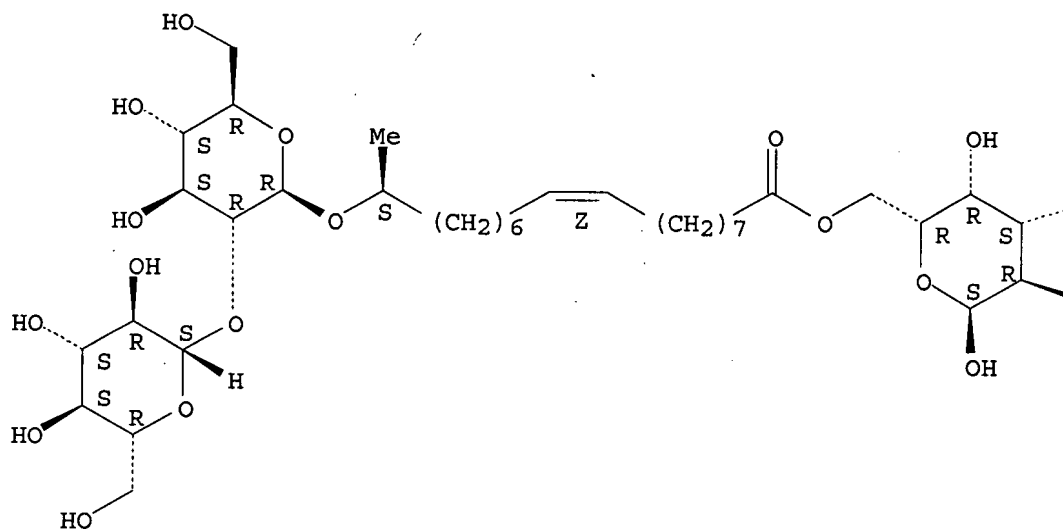
RN 655232-89-6 HCAPLUS

CN α -D-Galactopyranose, 6-[(9Z,17S)-17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-9-octadecenoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A



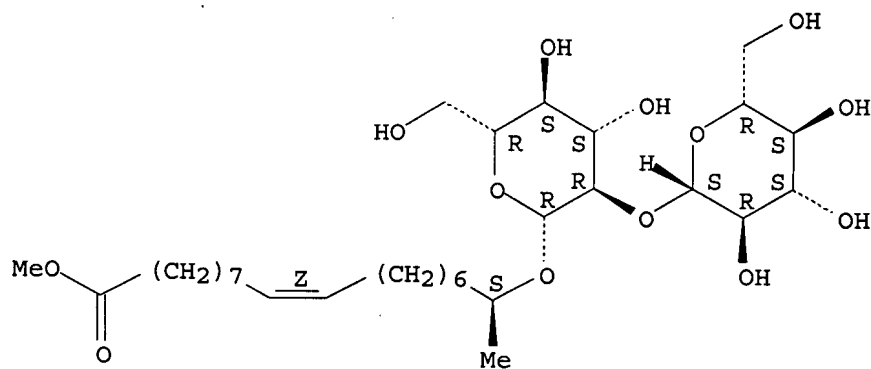
PAGE 1-B

OH

OH

IT 213754-46-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (enzymic preparation of galactopyranose sophorolipid esters)
 RN 213754-46-2 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-
 glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:505381 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 139:197675
 TITLE: Regioselective Enzyme-Catalyzed Synthesis of
 Sophorolipid Esters, Amides, and Multifunctional
 Monomers
 AUTHOR(S): Singh, Sanjay K.; Felse, Arthur P.; Nunez, Alberto;
 Foglia, Thomas A.; Gross, Richard A.
 CORPORATE SOURCE: NSF Center for Biocatalysis and Bioprocessing of
 Macromolecules, Department of Chemical Engineering
 Chemistry and Materials Science, Six Metrotech Center,
 Polytechnic University, Brooklyn, NY, 11201, USA
 SOURCE: Journal of Organic Chemistry (2003), 68(14), 5466-5477
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 139:197675

AB Novel enzyme-mediated synthetic routes were developed to provide a new family of sophorolipid derivs. and glycolipid-based amphiphilic monomers. These compds. are of great interest for their potential use in immunoregulation, as well as for other biol. properties. In the present work, an efficient lipase-catalyzed conversion of sophorolipid Et ester to (a) the 6'-monoacylated derivs. using Novozym 435, (b) 6''-monoacylated derivs. using Lipase PS-C, (c) secondary amide derivs. using Novozym 435, and (d) 6',6''-diacylated amide derivs. using Novozym 435 in an one-pot reaction and (e) the regioselective monoacylation of an amide derivative at the 6'- and 6''-positions using Novozym 435 and Lipase PS-C, resp., are described. The Et ester produced by esterification of the sophorolipid mixture with sodium ethoxide was subjected to acylation catalyzed by Novozym 435 in dry THF (THF) with vinyl acetate and vinyl methacrylate to produce 6'-monoacylated derivs. In contrast, Lipase PS-C catalyzed acylations of sophorolipid Et ester in dry THF with vinyl acetate and vinyl methacrylate to give the corresponding 6'-monoacylated derivs. Novozym 435 mediated amidation of sophorolipid Et ester in dry THF with phenethylamine, tyramine, p-methoxyphenethylamine, 2-(p-tolyl)ethylamine, and p-fluorophenethylamine generated the corresponding secondary amides but not tertiary amides. The formation of diacyl derivs. of amides was achieved by their treatment with vinyl acetate and vinyl methacrylate in dry THF using Novozym 435 as catalyst. The conversion of sophorolipid Et ester to the same diacyl derivs. of amide (i.e., both amidation and acylation) in high yield was also demonstrated in dry THF by a one-pot reaction using Novozym 435. Furthermore, regioselective monoacylation of a sophorolipid amide at 6' and 6'' in dry THF with vinyl acetate and vinyl methacrylate using Novozym 435 and Lipase PS-C was also demonstrated.

IT 585542-23-0P 585542-24-1P 585542-25-2P
585542-27-4P 585542-28-5P 585542-29-6P
585542-30-9P 585542-31-0P 585542-32-1P
585542-33-2P 585542-34-3P 585542-35-4P
585542-36-5P

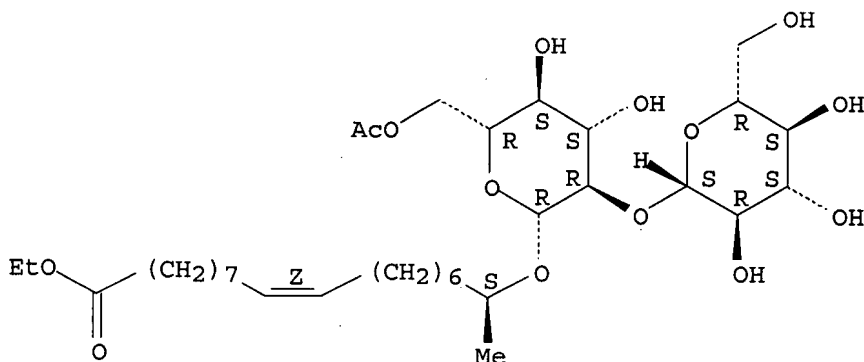
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)

(regioselective enzyme-catalyzed acylation in synthesis of sophorolipid esters amides and multifunctional monomers)

RN 585542-23-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[(6-O-acetyl-2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

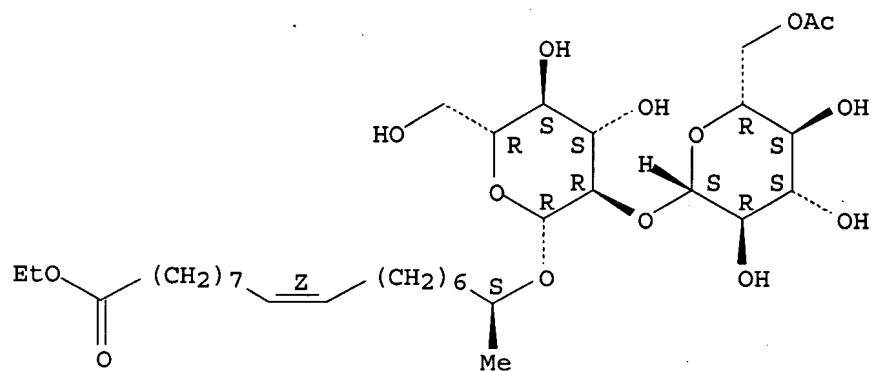
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-24-1 HCAPLUS

CN 9-Octadecenoic acid, 17-[[2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

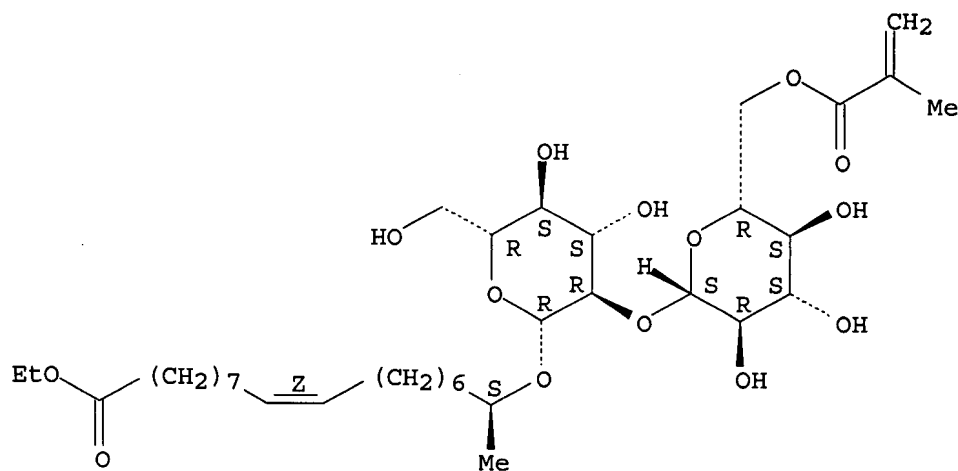
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-25-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[[2-O-[6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

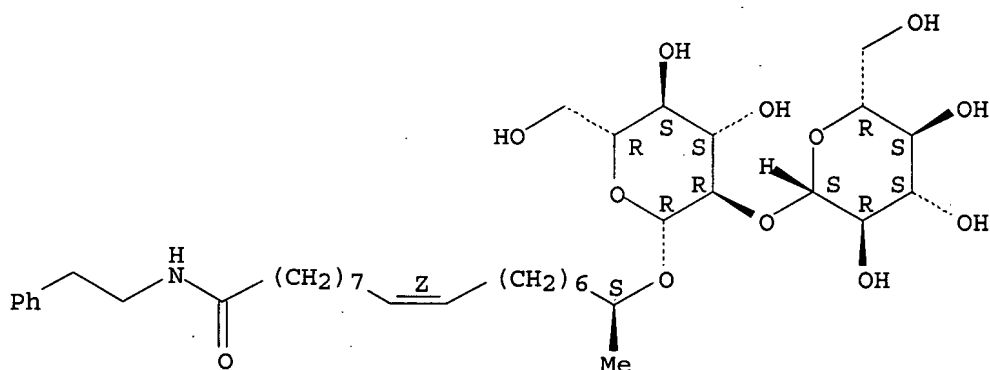
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-27-4 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-(2-phenylethyl)-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

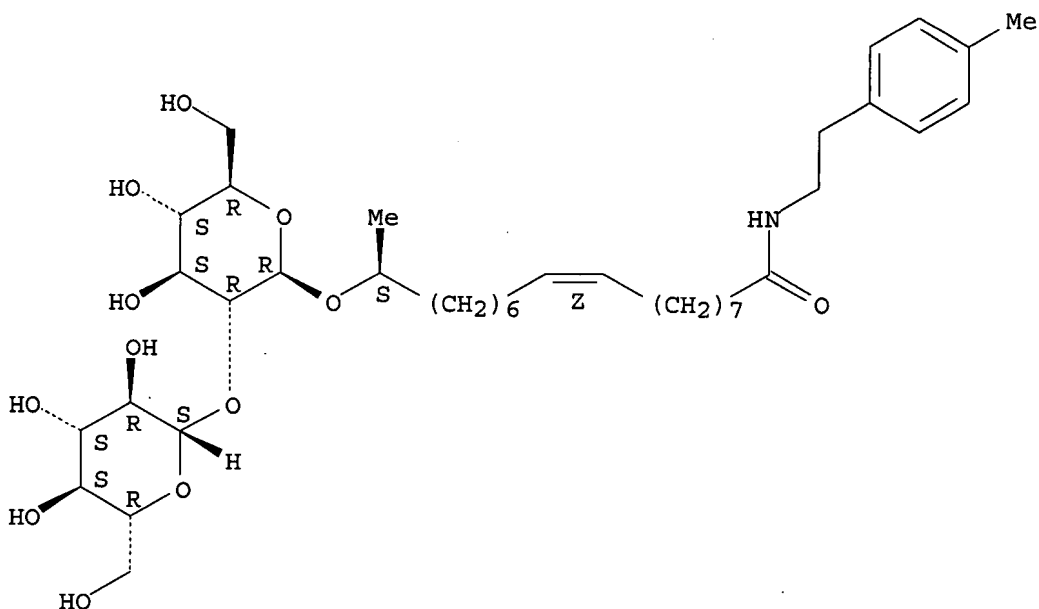


RN 585542-28-5 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-methylphenyl)ethyl]-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

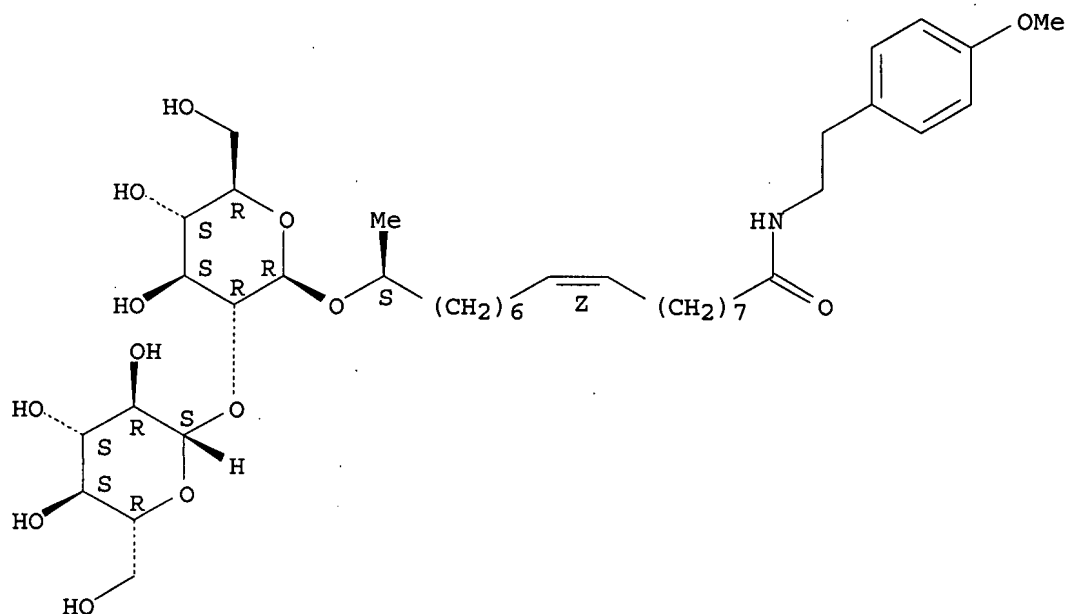


RN 585542-29-6 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-methoxyphenyl)ethyl]-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

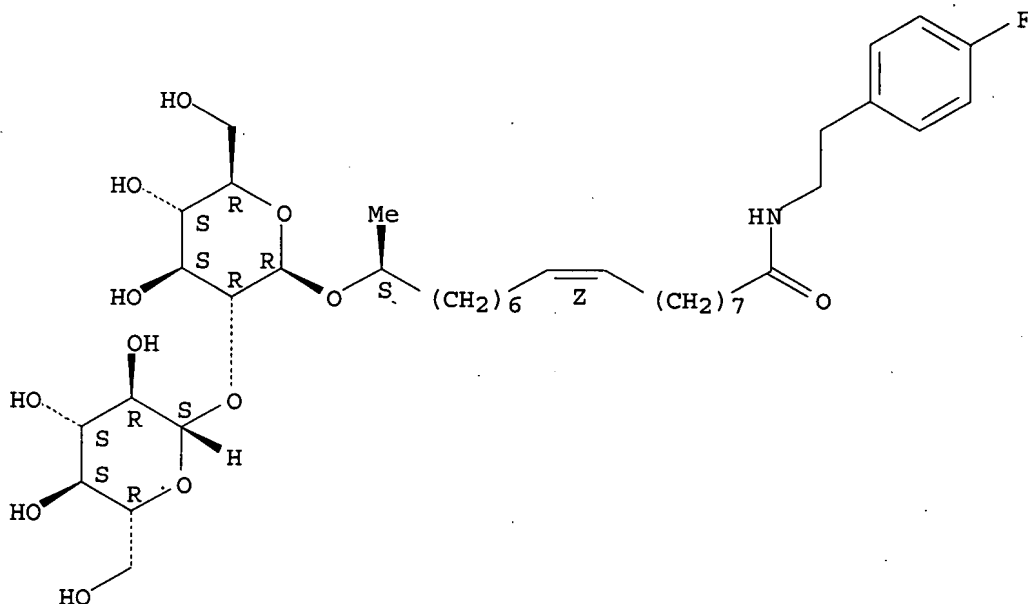


RN 585542-30-9 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-fluorophenyl)ethyl]-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

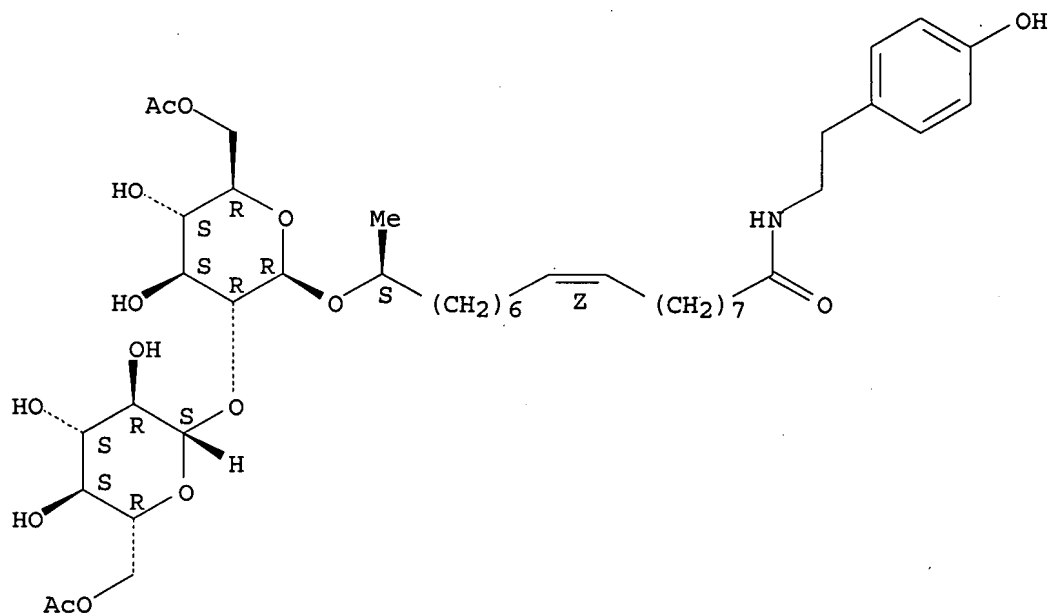
Double bond geometry as shown.



RN 585542-31-0 HCAPLUS

CN 9-Octadecenamide, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

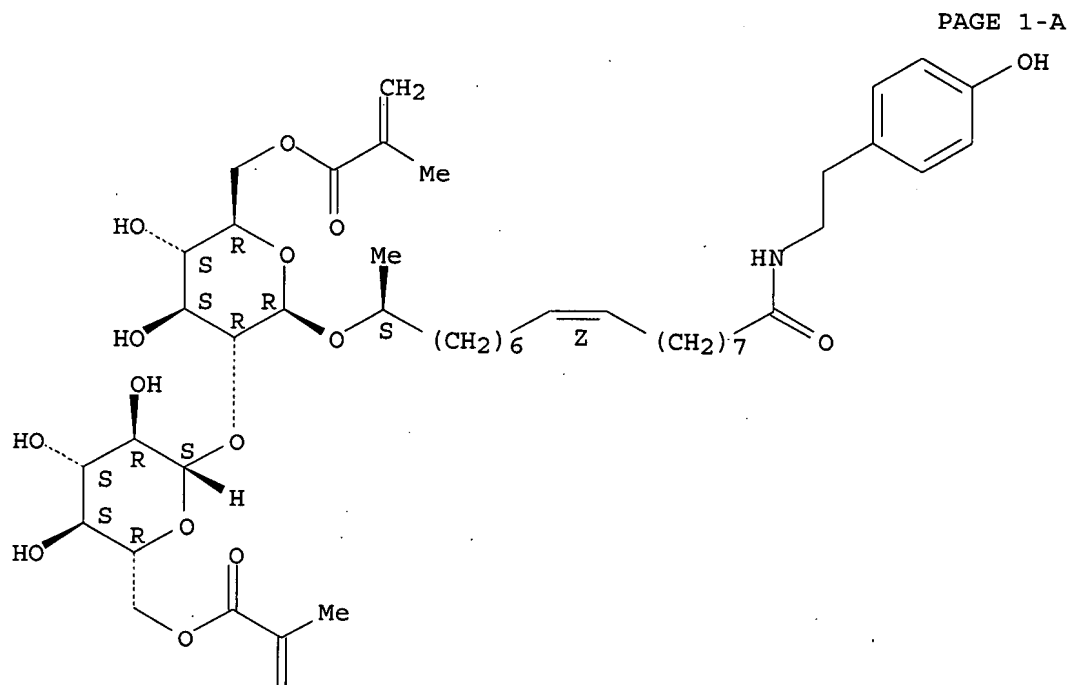
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-32-1 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-hydroxyphenyl)ethyl]-17-[[6-O-(2-methyl-1-oxo-2-propenyl)-2-O-[6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

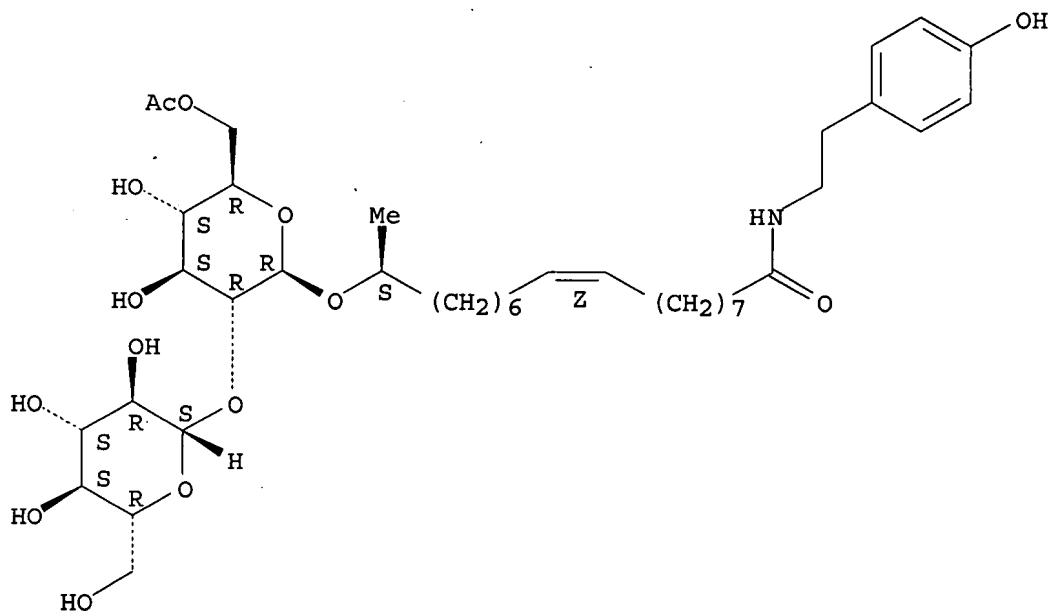


PAGE 2-A



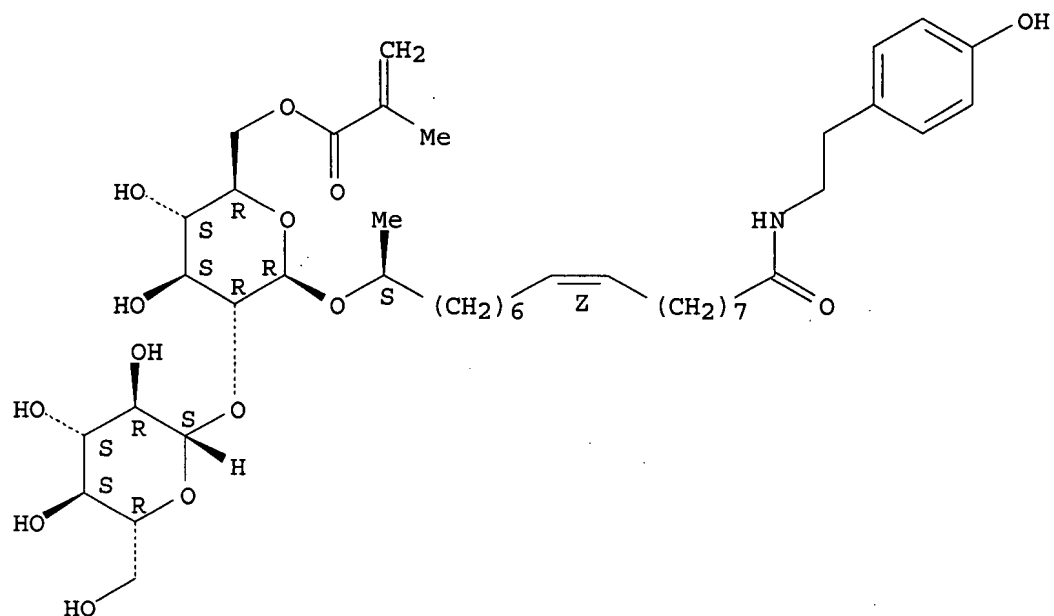
RN 585542-33-2 HCAPLUS
 CN 9-Octadecenamide, 17-[(6-O-acetyl-2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 585542-34-3 HCAPLUS
 CN 9-Octadecenamide, 17-[[2-O-β-D-glucopyranosyl-6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.

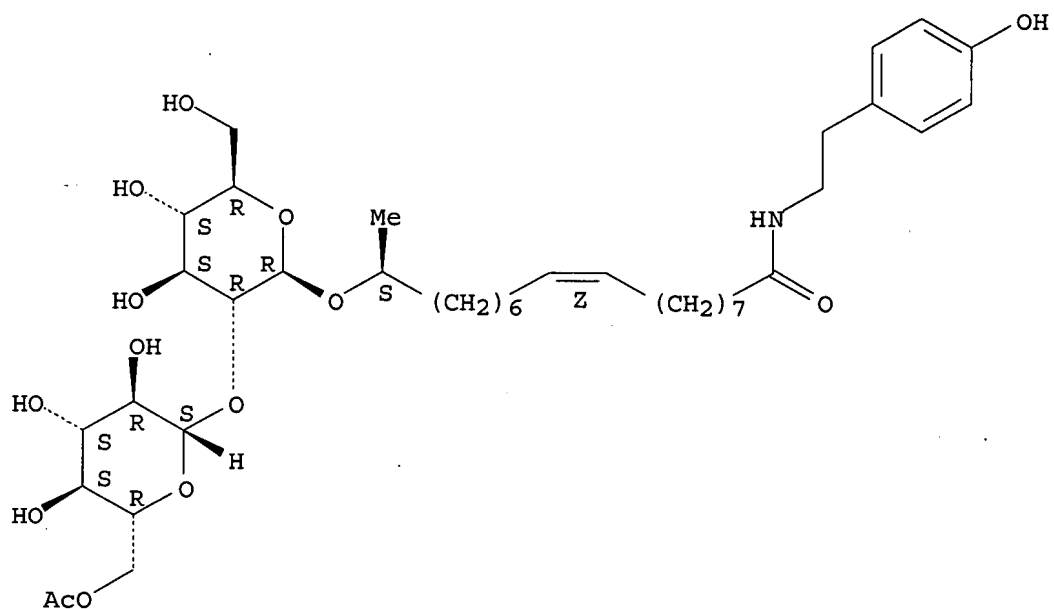


RN 585542-35-4 HCAPLUS

CN 9-Octadecenamide, 17-[[2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

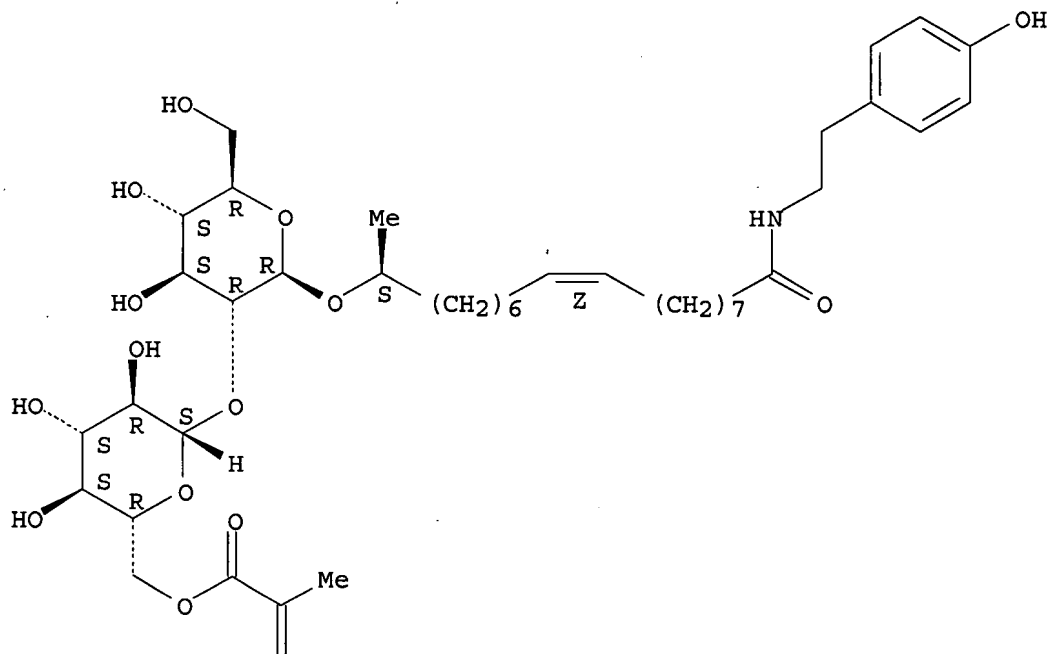


RN 585542-36-5 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-hydroxyphenyl)ethyl]-17-[[2-O-[6-O-(2-methyl-1-oxo-2-propenyl)- β -D-glucopyranosyl]- β -D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A

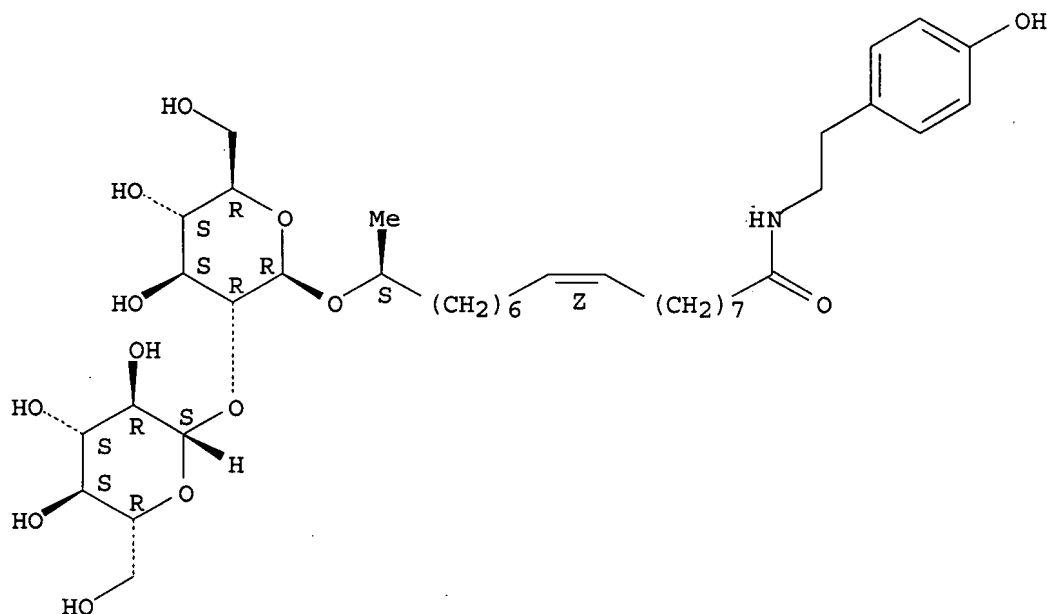


PAGE 2-A



IT 585542-26-3P
 RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (regioselective enzyme-catalyzed acylation in synthesis of sophorolipid esters amides and multifunctional monomers)
 RN 585542-26-3 HCAPLUS
 CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



IT 220608-02-6

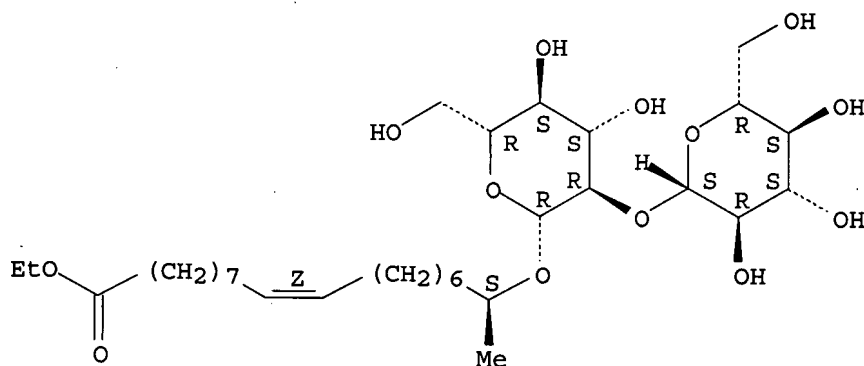
RL: RCT (Reactant); RACT (Reactant or reagent)
(regioselective enzyme-catalyzed acylation in synthesis of sophorolipid esters amides and multifunctional monomers)

RN 220608-02-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:419032 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 135:167087

TITLE: The synthesis and polymerization of glycolipid-based monomers

AUTHOR(S): Bisht, Kirpal S.; Gross, Richard A.

CORPORATE SOURCE: Center for Biocatalysis and Bioprocessing of Macromolecules, Six Metrotech Center, Polytechnic

University, Brooklyn, NY, 11202, USA
 SOURCE: ACS Symposium Series (2001), 786 (Biopolymers from Polysaccharides and Agroteins), 222-239
 CODEN: ACSMC8; ISSN: 0097-6156
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Well-defined sophorolipid biosurfactant analogs were prepared via enzymic synthesis for evaluation of bioactivity and as building blocks for preparation of glycolipid-based amphiphilic polymers. A 6-O-acryl sophorolipid derivative was prepared and homopolymd. and copolymd. with acrylic acid and acrylamide. The alkyl esters of sophorolipids, produced by *Torulopsis bombicola* were subjected to Novozym 435 catalyzed acylation in dry THF with vinyl acrylate and vinyl acetate to obtain the diacyl derivs. The regioselective synthesis of 6'-O-acryl sophorolipid derivative was accomplished by a lipase-catalyzed acylation reaction in dry organic solvent. Of the lipases screened, i.e., porcine pancreatic lipase (PPL), *Candida rugosa* lipase (CCL), PS-30, AK, MAP-10, Novozym-435 and Lipozyme IM, Novozym-435 was the biocatalyst of choice. Subsequent homopolymn. of the C-6' monoacryl sophorolipid derivative and its radical copolymn. with acrylamide and acrylic acid using AIBN afforded glycolipid-containing acrylate polymers.

IT 213754-46-2P 220608-05-9P 220608-09-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

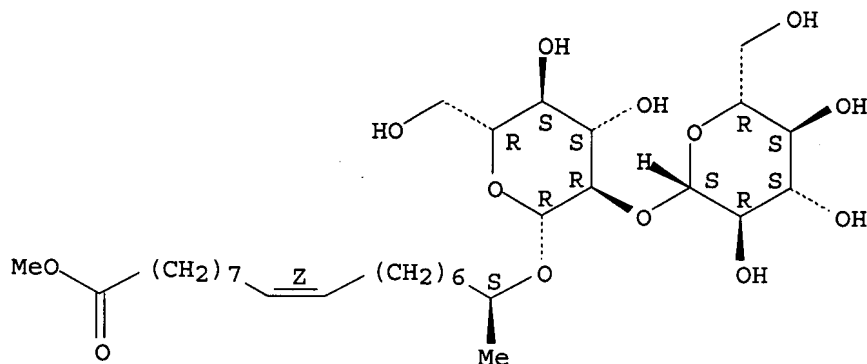
(intermediate; enzymic catalyzed synthesis of sophorolipid acrylate monomer and radical polymerization to obtain glycolipid-based amphiphilic polyacrylates)

RN 213754-46-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

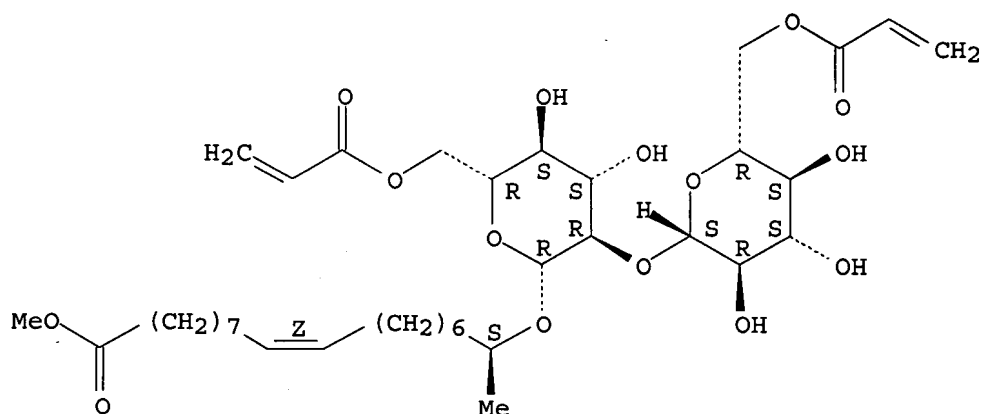


RN 220608-05-9 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-(1-oxo-2-propenyl)-2-O-[6-O-(1-oxo-2-propenyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

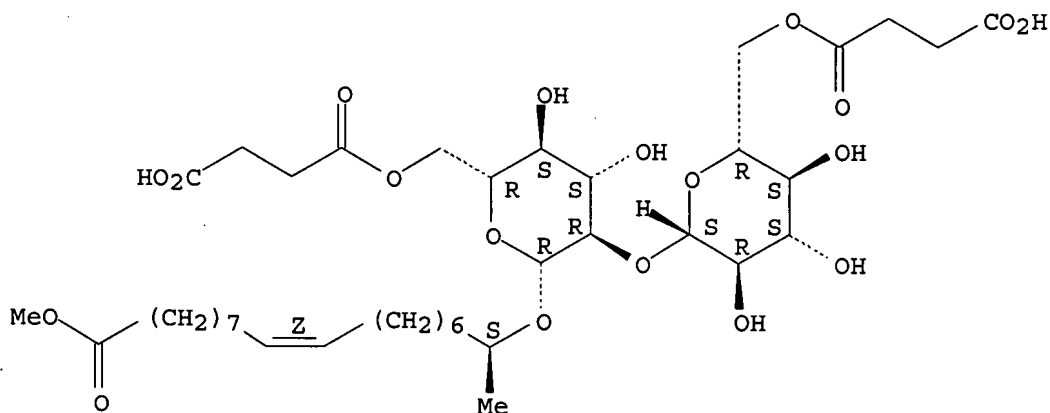
Double bond geometry as shown.



RN 220608-09-3 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-(3-carboxy-1-oxopropyl)-2-O-[6-O-(3-carboxy-1-oxopropyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, 1-methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:885905 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 134:206638

TITLE: Production of native and modified sophorose lipids

AUTHOR(S): Lang, Siegmund; Brakemeier, Andreas; Heckmann, Rolf; Spockner, Stefanie; Rau, Udo

CORPORATE SOURCE: Department of Biochemistry and Biotechnology, Biotechnology Group, Technical University of Braunschweig, Braunschweig, D-38106, Germany

SOURCE: Chimica Oggi (2000), 18(10), 76-79
CODEN: CHOGDS; ISSN: 0392-839X

PUBLISHER: TeknoScienze

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:206638

AB Depending on the co-substrate, the yeast *Candida bombicola* is able to

overproduce different kinds of sophorose lipids during cultivation on glucose as the main carbon and energy source. With oleic acid, yields of 76 g l⁻¹ d⁻¹ were obtained by a continuous process. In contrast to classical products found by this mode, using 2-tetradecanol a novel-type alkyl sophoroside was produced yielding 2.9 g l⁻¹ d⁻¹. The native sophorose lipid first mentioned was modified by a glycosidase-catalyzed reaction to a glucose lipid. Another modification was successfully performed with alkyl amines leading to alkyl amides of the acidic sophorose lipid. Depending on the mol. structure the products reduced the surface tension of water from 72 mN m⁻¹ to a min. of approx. 30 mN m⁻¹ in the case of the 2-tetradecyl sophoroside.

IT 328569-86-4P

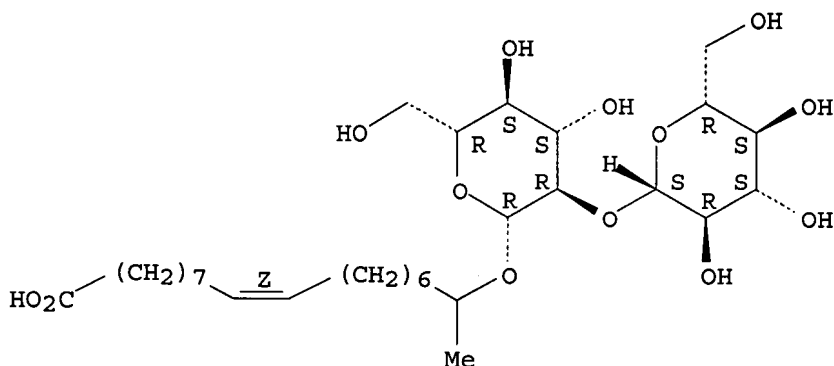
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(production of native and modified sophorose lipids)

RN 328569-86-4 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 328569-88-6P 328569-89-7P 328569-90-0P

328569-91-1P

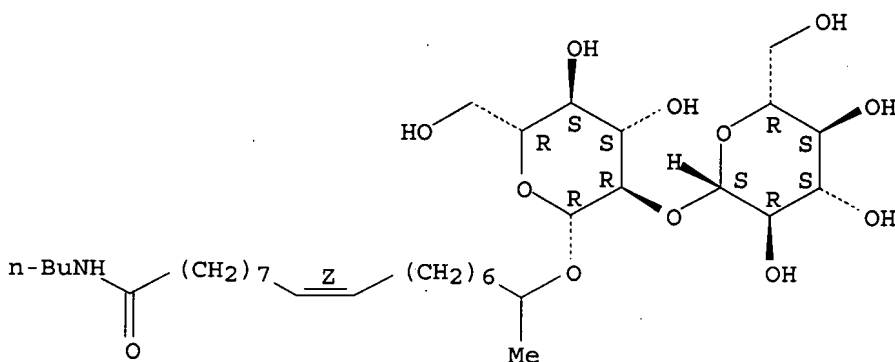
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(production of native and modified sophorose lipids)

RN 328569-88-6 HCAPLUS

CN 9-Octadecenamide, N-butyl-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

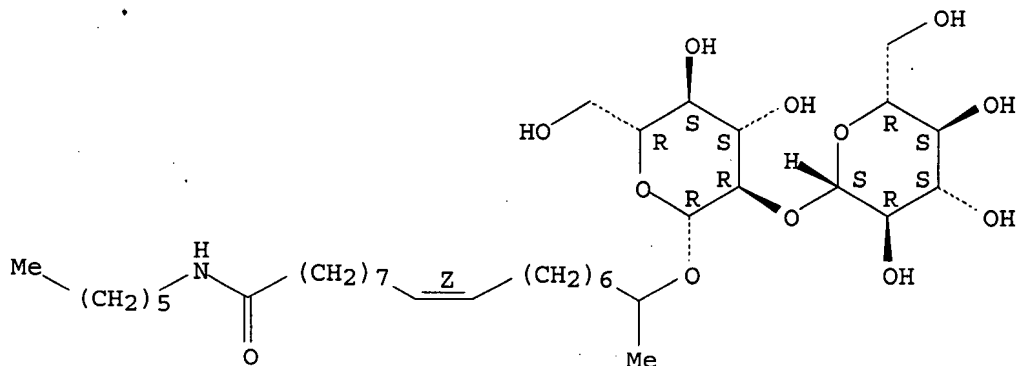


RN 328569-89-7 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-hexyl-, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

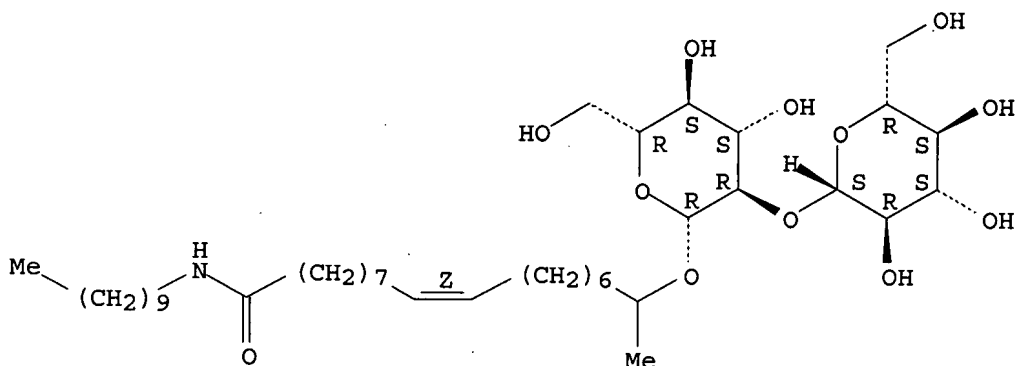


RN 328569-90-0 HCAPLUS

CN 9-Octadecenamide, N-decyl-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

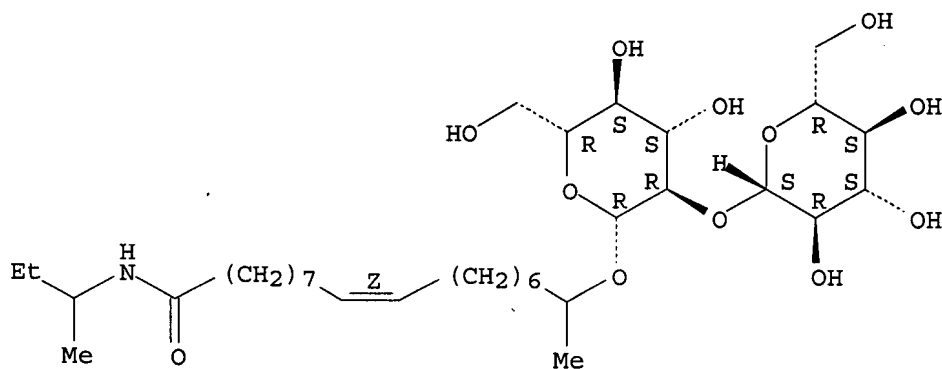


RN 328569-91-1 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-(1-methylpropyl)-, (9Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

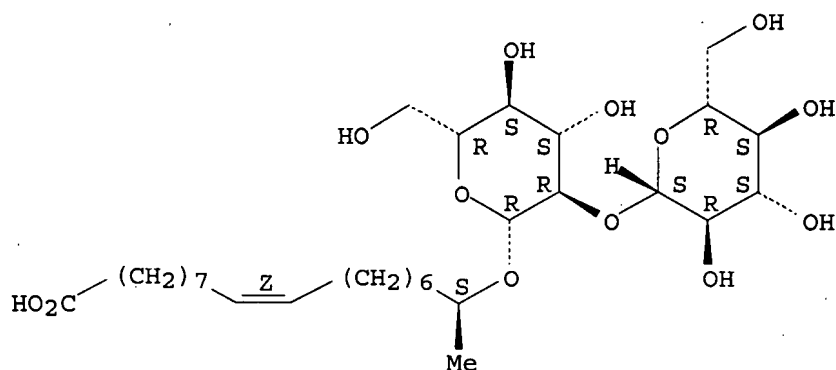
Double bond geometry as shown.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:810168 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 132:136455
 TITLE: Enzymatic conversion of a sophorolipid into a glucose lipid
 AUTHOR(S): Rau, Udo; Heckmann, Rolf; Wray, Victor; Lang, Siegmund
 CORPORATE SOURCE: Institut für Biochemie und Biotechnologie, Technische Universität Braunschweig, Braunschweig, 38106, Germany
 SOURCE: Biotechnology Letters (1999), 21(11), 973-977
 CODEN: BILED3; ISSN: 0141-5492
 PUBLISHER: Kluwer Academic Publishers
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 132:136455
 AB The diacetylated lactonic sophorolipid from *Candida bombicola* was converted into the deacetylated acidic form by alkaline hydrolysis and subsequently treated with several glycosidases. One of these enzymes, a hesperidinase (E.C. 3.2.1.40), was most active in the specific release of one glucose mol. from the disaccharide lipid. The novel glucolipid was isolated and characterized. The surface and interfacial tension of aqueous solns. were measured and compared with the lactonic and acidic sophorolipid.
 IT 220608-11-7
 RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
 (enzymic conversion of a sophorolipid into a glucose lipid)
 RN 220608-11-7 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

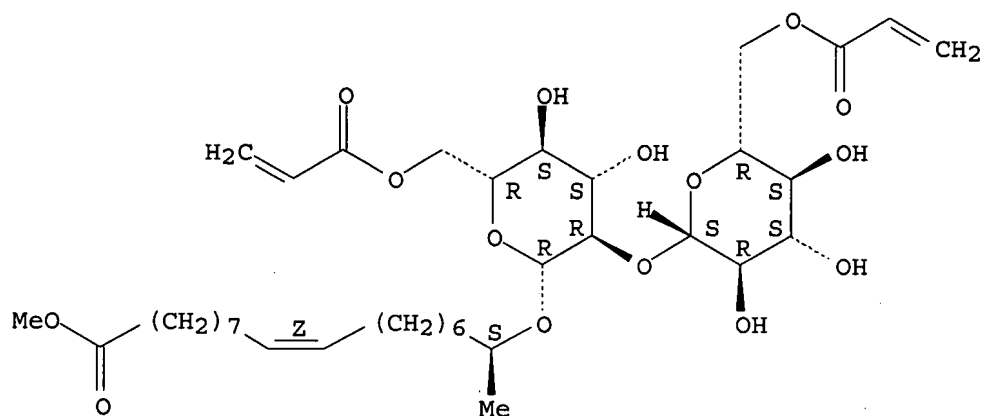
L7 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:29511 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 130:182663
 TITLE: Enzyme-Mediated Regioselective Acylations of Sophorolipids
 AUTHOR(S): Bisht, Kirpal S.; Gross, Richard A.; Kaplan, David L.
 CORPORATE SOURCE: Polytechnic University, Brooklyn, NY, 11201, USA
 SOURCE: Journal of Organic Chemistry (1999), 64(3), 780-789
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 130:182663

AB Enzymic synthesis of well-defined sophorolipid analogs for evaluation of their bioactivities and as new building blocks for the preparation of glycolipid-based amphiphilic polymers is described. Lipase Novozym 435 from *Candida antarctica* has been shown to be an efficient catalyst for acylation of sophorolipids esters. A mixture of sophorolipids produced by *Torulopsis bombicola* was esterified by reaction with sodium alkoxide. The alkyl esters of sophorose lipids were subjected to Novozym 435 catalyzed acylation in dry THF with vinyl acrylate and vinyl acetate to diacyl derivs. The reactions were highly regioselective, and exclusive acylation of the hydroxyl groups on C-6' and C-6'' took place. Me ester in the absence of the acylating agent, or with the agent at a concentration less than equimolar, gave sophorolactone. Careful anal. of the spectral data revealed it to be a synthetic analog of microbially produced macrolactone. Sophorolactone differs in the site at which the sophorose ring is attached to the fatty acid. Specifically, unlike the natural sophorolipids, the fatty acid carboxyl carbon is linked to the C-6'' hydroxyl, not to the C-4'' hydroxyl. Subsequent acrylation catalyzed by Novozym 435 led to the formation of the C-6' monoacryl derivative linked only to the primary site.

IT 220608-05-9P 220608-06-0P 220608-07-1P
 220608-08-2P 220608-09-3P
 RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
 (enzyme-mediated regioselective acylations of sophorolipids)

RN 220608-05-9 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-(1-oxo-2-propenyl)-2-O-[6-O-(1-oxo-2-propenyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

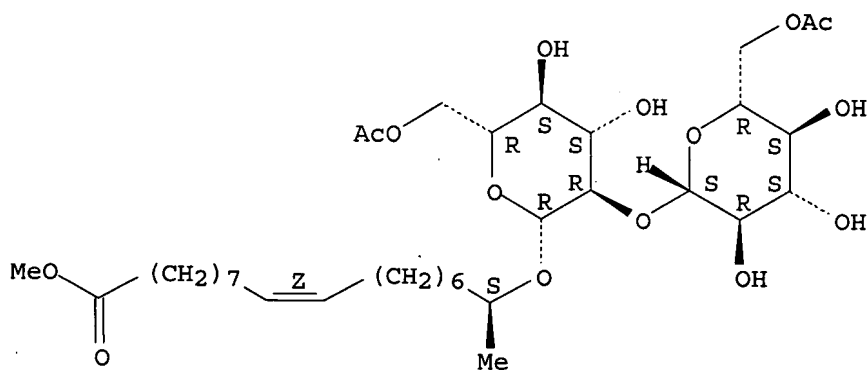
Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 220608-06-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

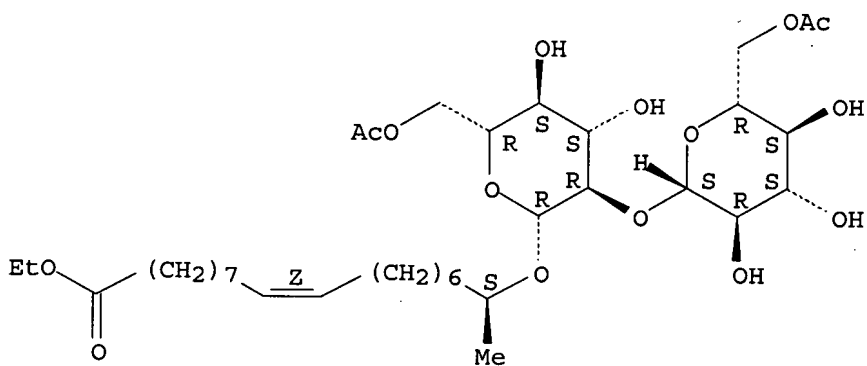
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 220608-07-1 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

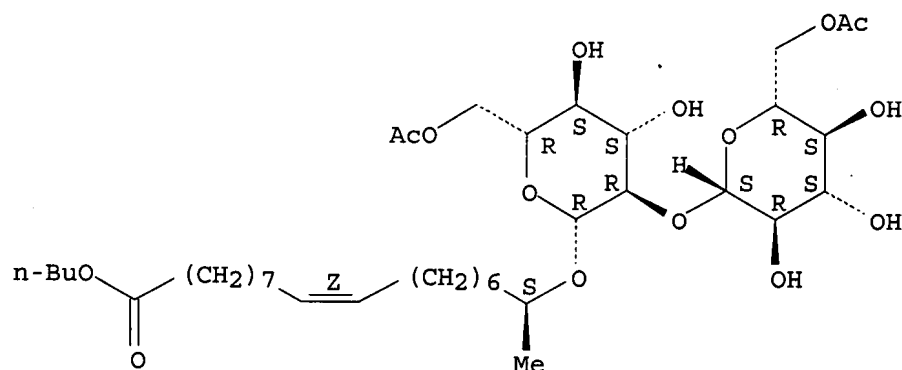
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 220608-08-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, butyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

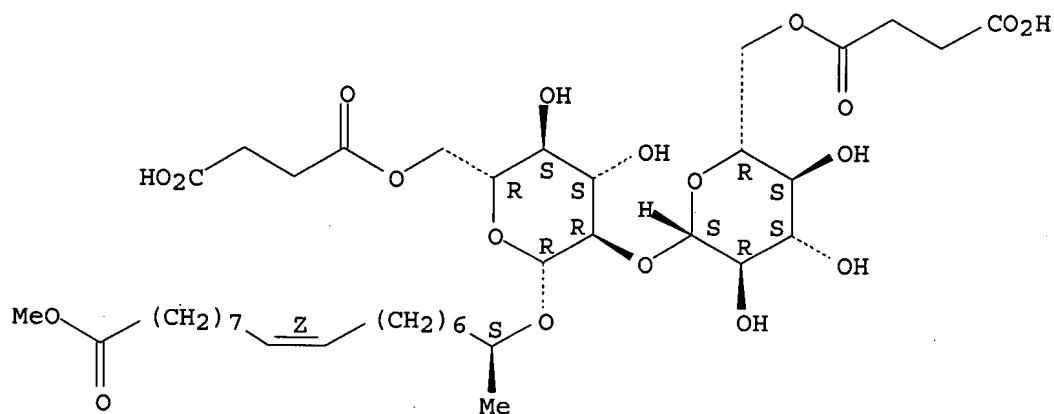
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 220608-09-3 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-(3-carboxy-1-oxopropyl)-2-O-[6-O-(3-carboxy-1-oxopropyl)- β -D-glucopyranosyl]- β -D-glucopyranosyl]oxy]-, 1-methyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



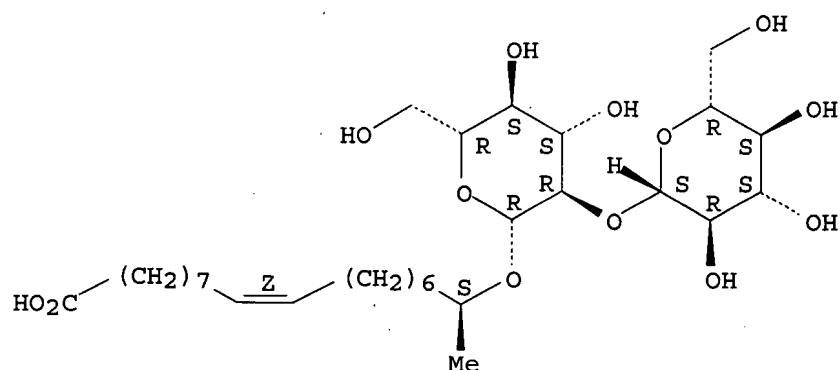
IT 220608-11-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(enzyme-mediated regioselective acylations of sophorolipids)

RN 220608-11-7 HCAPLUS

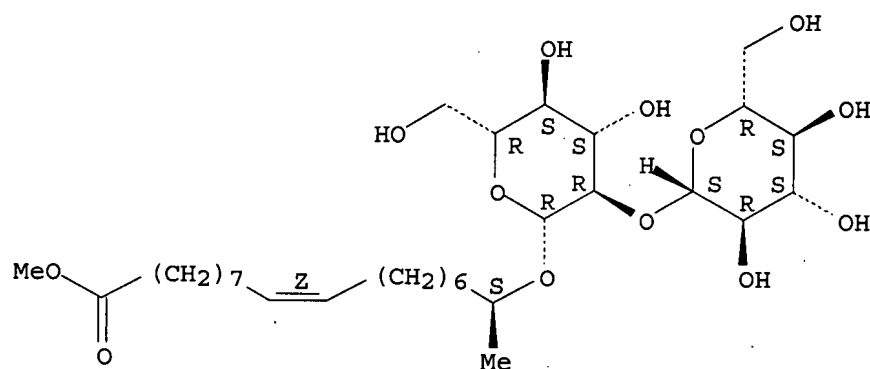
CN 9-Octadecenoic acid, 17-[(2-O- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



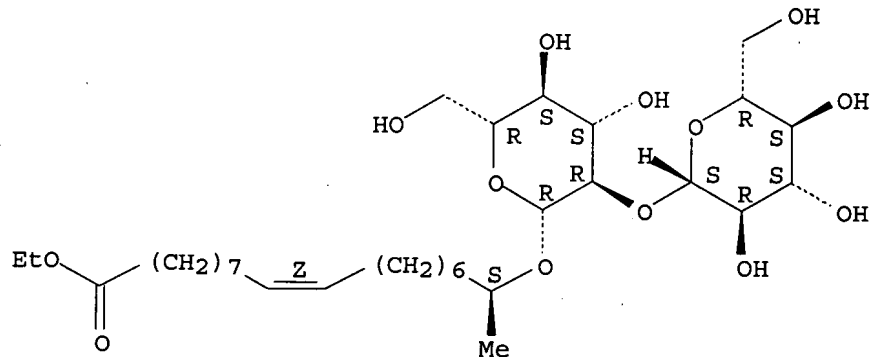
IT 213754-46-2P 220608-02-6P 220608-04-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (enzyme-mediated regioselective acylations of sophorolipids)
 RN 213754-46-2 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



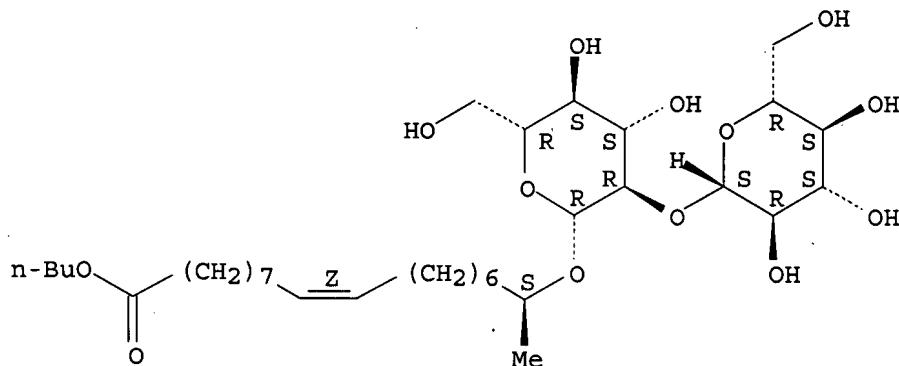
RN 220608-02-6 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 220608-04-8 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, butyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

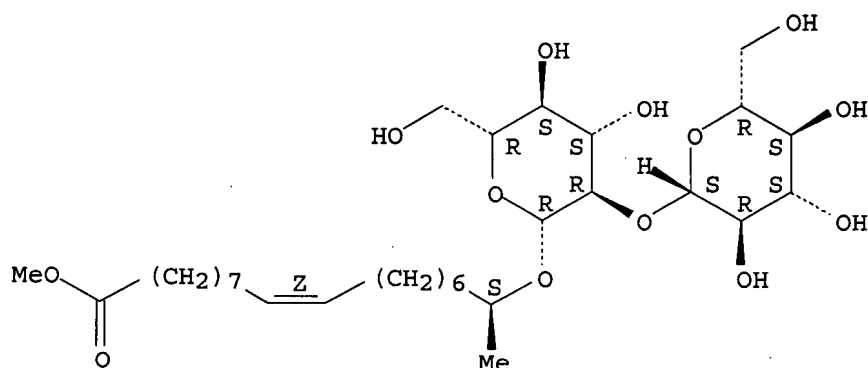
L7 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1998:546435 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 129:276158
 TITLE: Glycolipid containing polyacrylate and polyacrylamide copolymers
 AUTHOR(S): Bisht, Kirpal; Watterson, Arthur C.; Gross, Richard A.
 CORPORATE SOURCE: Dep. Chem., Univ. Massachusetts, Lowell, MA, 01854, USA
 SOURCE: Polymeric Materials Science and Engineering (1998), 79, 246-247
 CODEN: PMSLEDG; ISSN: 0743-0515
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Enzymic transformations were carried out on sophorose lipid, produced by *T. bombicola* grown on a mixture of oleic acid and glucose, in a regio-specific manner. Homo- or co-polymerization, with acrylic acid or acrylamide, was undertaken to produce polymer structures bearing amphiphilic side chain groups, which have potential for use as pharmacol. active agents.

IT 213754-46-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (glycolipid-containing polyacrylate and polyacrylamide copolymers)

RN 213754-46-2 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:531598 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 129:285646

TITLE: Bioactivity of extracellular glycolipids - investigation of potential anti-cancer activity of sophorolipids and sophorolipid-derivatives

AUTHOR(S): Scholz, C.; Mehta, S.; Bisht, K.; Guilmanov, V.; Kaplan, D.; Nicolosi, R.; Gross, R.

CORPORATE SOURCE: Department of Chemistry, University of Massachusetts, Lowell, MA, 01854, USA

SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(2), 168-169
CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sophorolipid (SL) analogs were prepared by alcoholysis and enzyme-catalyzed acetylation of a complex natural SL-mixture of *Candida bombicola* obtained from fermentation. The extent was determined of Jurkat (leukemia) and Tu 138 (head and neck cancer) cell growth inhibition resulting from exposure of the cells to different SL-analogs. Acetylation at the primary positions of the SL carbohydrate head group showed a potential anticancer activity for both cancer cell lines. The Tu 138 cell line seemed to be more susceptible than the Jurkat cells to treatment with the SL-derivs. The Tu 138 cell line showed enhanced inhibition of cell growth by increasing the chain length from C4 to C10 of the n-alkanol that was esterified to the SL lipid moiety.

IT 214218-57-2P 214218-58-3P 214218-59-4P

214218-60-7P 214218-61-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

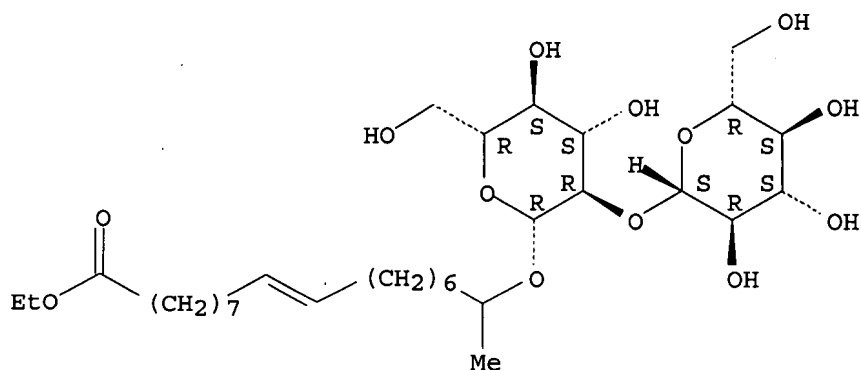
(potential anti-cancer activity of sophorolipids and sophorolipid-derivs.)

RN 214218-57-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

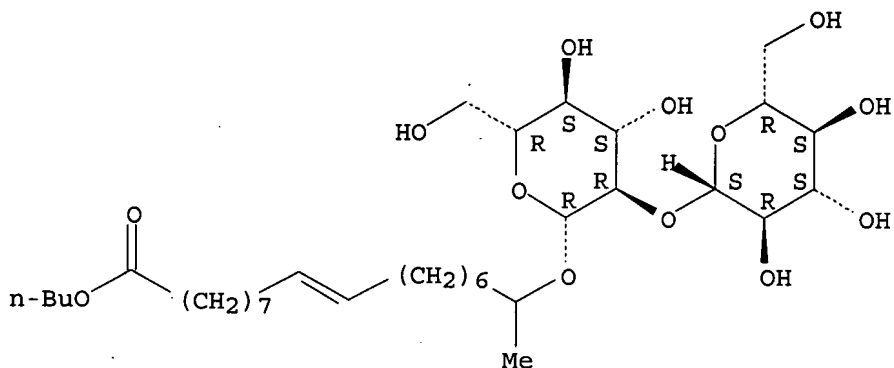
Double bond geometry unknown.



RN 214218-58-3 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-beta-D-glucopyranosyl-beta-D-glucopyranosyl)oxy]-, butyl ester (9CI) (CA INDEX NAME)

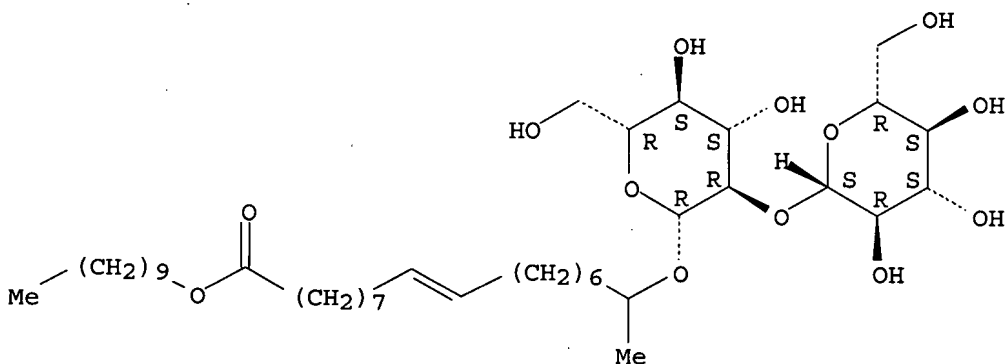
Absolute stereochemistry.
Double bond geometry unknown.



RN 214218-59-4 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-beta-D-glucopyranosyl-beta-D-glucopyranosyl)oxy]-, decyl ester (9CI) (CA INDEX NAME)

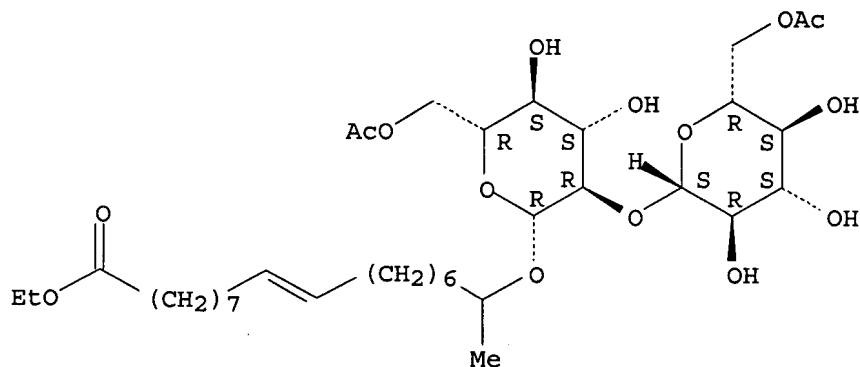
Absolute stereochemistry.
Double bond geometry unknown.



RN 214218-60-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, ethyl ester (9CI) (CA INDEX NAME)

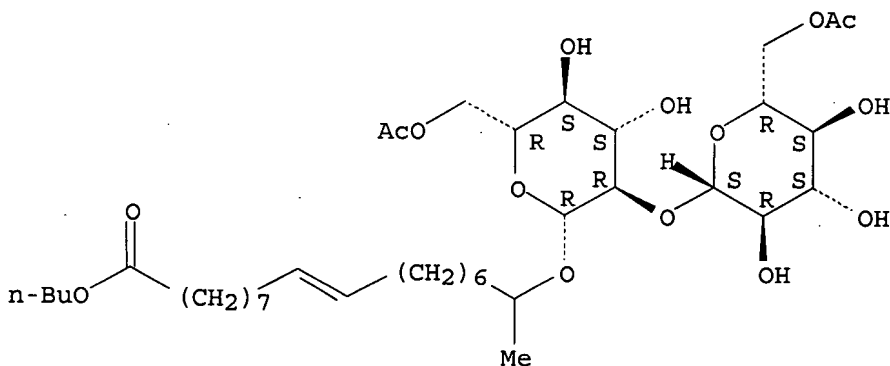
Absolute stereochemistry.
Double bond geometry unknown.



RN 214218-61-8 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, butyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:396246 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 127:120735

TITLE: A sophorose lipid from microbial conversion of oleyl alcohol

AUTHOR(S): Shi, Yi Ping; Li, Jiang Yun; Li, Zu Yi

CORPORATE SOURCE: State Key Lab. Bioorg. Natural Product Chem., Shanghai Inst. Org. Chem., Shanghai, 200032, Peop. Rep. China

SOURCE: Chinese Chemical Letters (1997), 8(5), 417-418
CODEN: CCLLEE7

PUBLISHER: Chinese Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Using oleyl alc. as C source for the cultivation of yeast *Torulopsis* sp., a modified sophorose lipid was isolated as the major product. This product was characterized as the octadecyl derivative by ¹H NMR and FAB-MS. Hydrogenation gave an octadecyl ester: octadecyl 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy] octadecanoate 6',6'-diacetate.

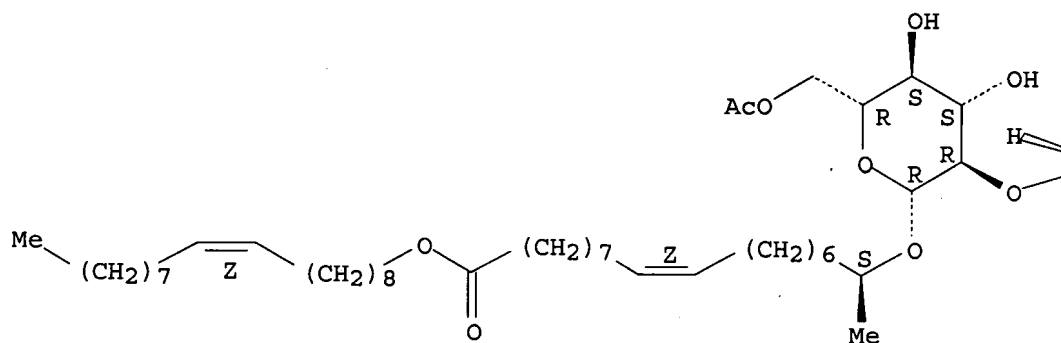
IT 192811-02-2P
 RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (sophorose lipid from microbial conversion of oleyl alc.)

RN 192811-02-2 HCAPLUS

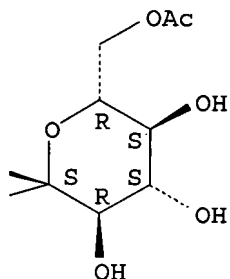
CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, (9Z)-9-octadecenyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1995:796820 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 123:250351
 TITLE: Tandem mass spectrometry and nuclear magnetic resonance spectroscopy studies of *Candida bombicola* sophorolipids and product formed on hydrolysis by cutinase
 AUTHOR(S): de Koster, Chris G.; Heerma, Wigger; Pepermans, Henri

A. M.; Groenewegen, Anneke; Peters, Hans; Haverkamp, Johan

CORPORATE SOURCE: Bijvoet Center for Biomolecular Research, Univ. Utrecht, Utrecht, 3508 TB, Neth.

SOURCE: Analytical Biochemistry (1995), 230(1), 135-48
CODEN: ANBCA2; ISSN: 0003-2697

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Natural mixts. of sophorolipids produced by the yeast *Candida bombicola* have been analyzed by fast-atom-bombardment (FAB)-MS and collision-induced dissociation (CID)-MS. Some pure components were analyzed by 2-dimensional NMR spectroscopy. The presence of acidic, lactonic, and O-acetylated forms and the position of double bonds in the fatty acid part of these glycolipids can be easily inferred from pos.- and neg.-ion FAB-mass spectra. Details about position of O-acetylation can be obtained from CID mass spectra of $[M + H]^+$ and $[M - H]^-$ ions and from the NMR spectra. Differences in CID fragmentation between protonated and sodiated mol. ions are discussed in detail. Enzymic hydrolysis of 6',6''-di-O-acetyl sophorolipid lactone by cutinase from *Fusarium solani* results specifically in the removal of the 6'-O-acetyl group, whereas the 6''-O-acetyl and lactone group are resistant. This specificity is explained from a 3-dimensional model of the sophorolipid generated on the basis of the short 1H,1H distances as inferred from the NMR (ROESY) spectra.

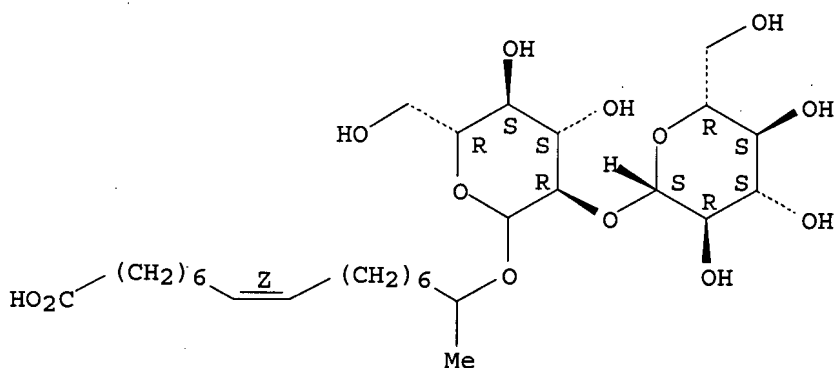
IT 168699-93-2 168699-96-5 168699-97-6
168699-99-8

RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(tandem mass spectrometry and NMR spectroscopy of *Candida* sophorolipids and cutinase hydrolysis product)

RN 168699-93-2 HCAPLUS

CN 8-Heptadecenoic acid, 16-[(2-O- β -D-glucopyranosyl-D-glucopyranosyl)oxy]-, (Z)- (9CI) (CA INDEX NAME)

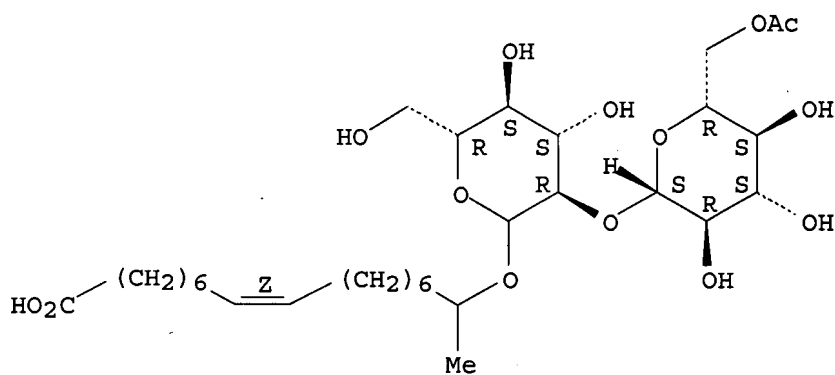
Absolute stereochemistry.
Double bond geometry as shown.



RN 168699-96-5 HCAPLUS

CN 8-Heptadecenoic acid, 16-[[2-O-(6-O-acetyl- β -D-glucopyranosyl)-D-glucopyranosyl]oxy]-, (Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

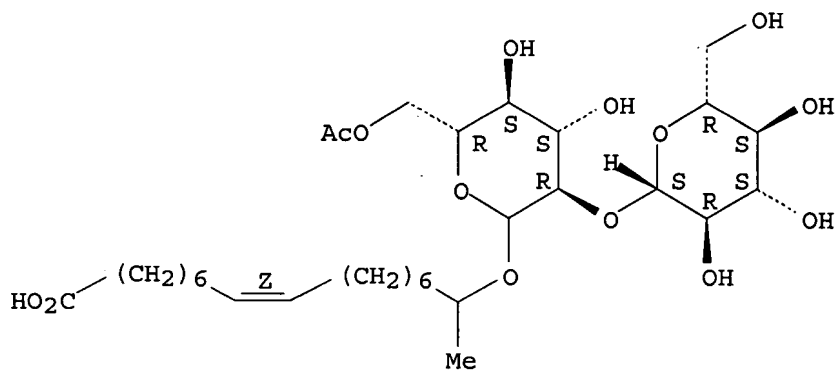


RN 168699-97-6 HCAPLUS

CN 8-Heptadecenoic acid, 16-[(6-O-acetyl-2-O-β-D-glucopyranosyl-D-glucopyranosyl)oxy]-, (Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

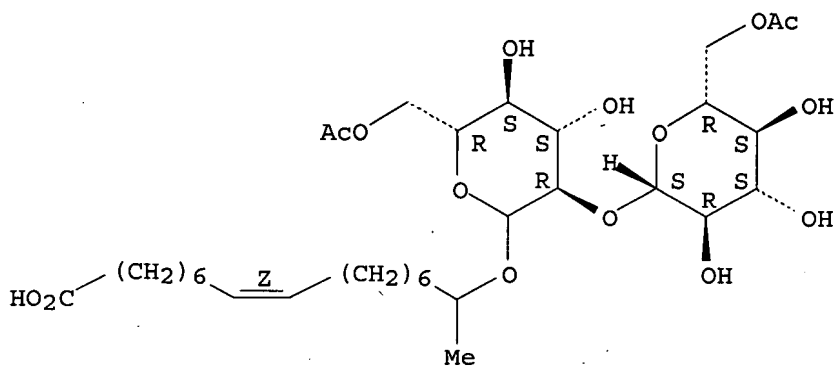


RN 168699-99-8 HCAPLUS

CN 8-Heptadecenoic acid, 16-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-D-glucopyranosyl]oxy]-, (Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

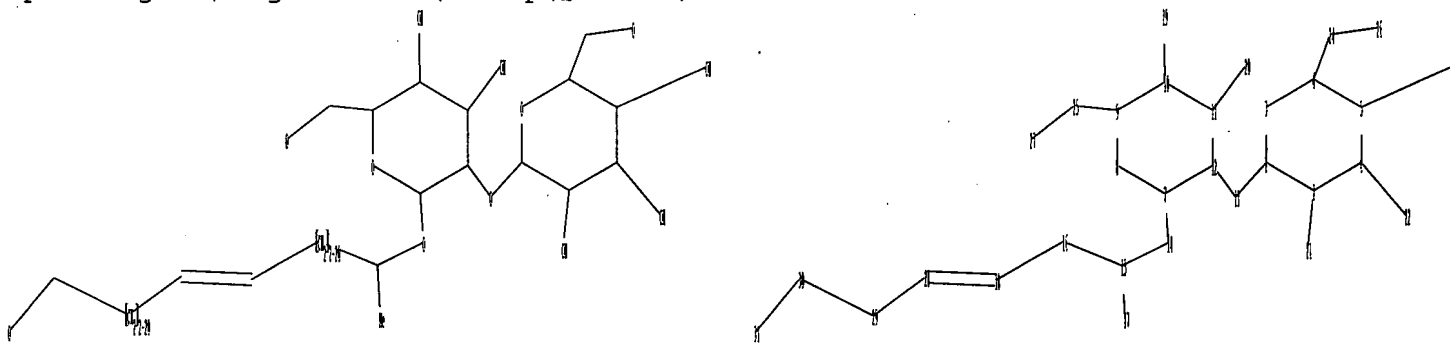


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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

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ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-21 2-13 4-24 5-23 6-22 7-14 9-25 10-19 11-20 12-13 14-15 15-16 15-17
16-18 18-28 24-26 25-27 28-29 29-30 30-31
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
1-2 1-6 1-21 2-3 2-13 3-4 4-5 5-6 5-23 6-22 7-8 7-12 7-14 8-9 9-10
10-11 10-19 11-12 11-20 12-13 14-15 24-26 25-27 30-31
exact bonds :
4-24 9-25 15-16 15-17 16-18 18-28 28-29 29-30

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS
20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS
31:CLASS

L1 STRUCTURE UPLOADED

=> s l1 sss sam
SAMPLE SEARCH INITIATED 16:14:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 876 TO ITERATE

100.0% PROCESSED 876 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15745 TO 19295
PROJECTED ANSWERS: 4 TO 200

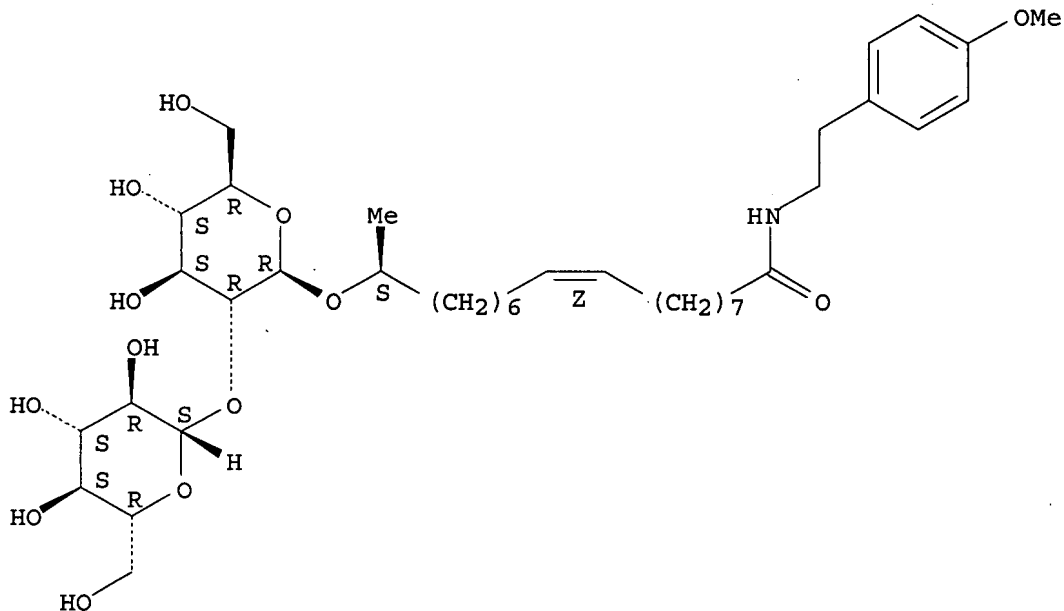
L2 4 SEA SSS SAM L1

=> d scan

L2 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-methoxyphenyl)ethyl]-, (9Z,17S)- (9CI)

MF C39 H65 N O13

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

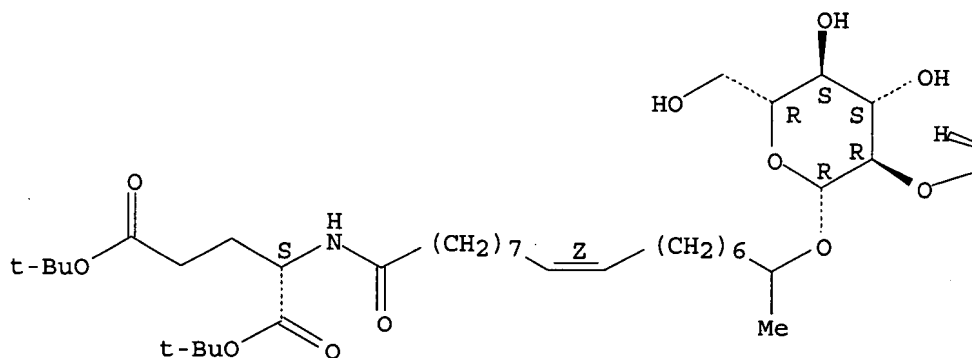
L2 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN L-Glutamic acid, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, 1,5-bis(1,1-dimethylethyl) ester

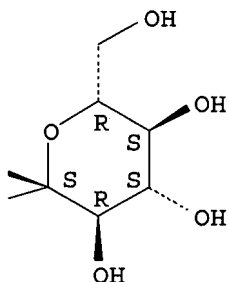
MF C43 H77 N O16

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



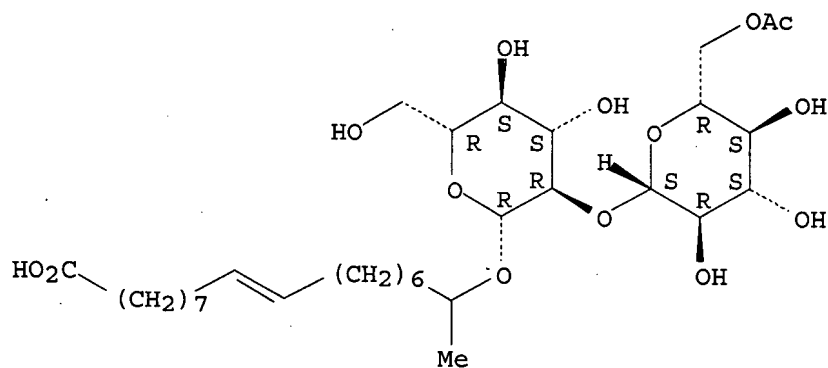
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN INDEX NAME NOT YET ASSIGNED
 MF C32 H56 O14

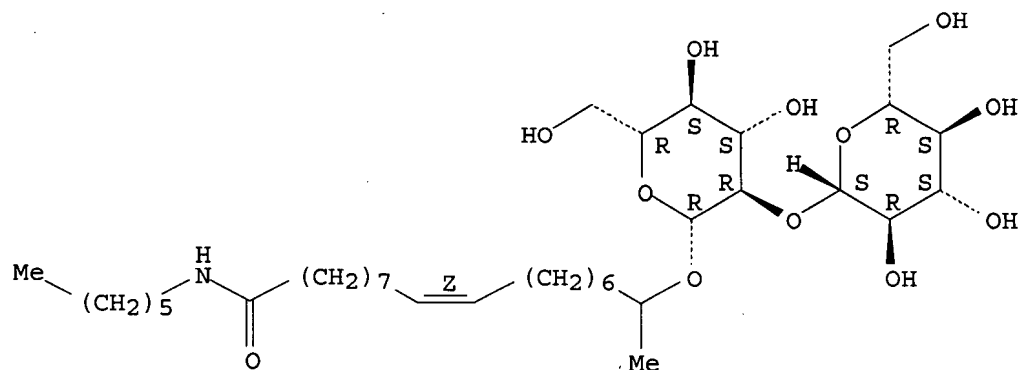
Absolute stereochemistry.
 Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 4 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-hexyl-, (9Z)- (9CI)
 MF C36 H67 N O12

Absolute stereochemistry.
 Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s l1 sss full
 FULL SEARCH INITIATED 16:15:12 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 18133 TO ITERATE

100.0% PROCESSED 18133 ITERATIONS 68 ANSWERS
 SEARCH TIME: 00.00.01

L3 68 SEA SSS FUL L1

=> fil hcaplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	172.10	173.36

FILE 'HCAPLUS' ENTERED AT 16:15:17 ON 09 AUG 2007
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FILE COVERS 1907 - 9 Aug 2007 VOL 147 ISS 7
 FILE LAST UPDATED: 8 Aug 2007 (20070808/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
 L4 21 L3

=> s virus or antiviral or HIV

366796 VIRUS

77485 VIRUSES

380559 VIRUS

(VIRUS OR VIRUSES)

61195 ANTIVIRAL

1228 ANTIVIRALS

61442 ANTIVIRAL

(ANTIVIRAL OR ANTIVIRALS)

73360 HIV

98 HIVS

73377 HIV

(HIV OR HIVS)

L5 415133 VIRUS OR ANTIVIRAL OR HIV

=> s 14 and 15

L6 4 L4 AND L5

=> d 16 ibib abs hitstr 1-4

L6 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1136366 HCAPLUS <<LOGINID::20070809>>

DOCUMENT NUMBER: 146:41746

TITLE: Amino Acid Conjugated Sophorolipids: A New Family of Biologically Active Functionalized Glycolipids

AUTHOR(S): Azim, Abul; Shah, Vishal; Doncel, Gustavo F.; Peterson, Nicholas; Gao, Wei; Gross, Richard

CORPORATE SOURCE: NSF I/UCR Center for Biocatalysis and Bioprocessing of Macromolecules, Polytechnic University, Brooklyn, NY, 11201, USA

SOURCE: Bioconjugate Chemistry (2006), 17(6), 1523-1529
CODEN: BCCHE; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sophorolipids (SLs) are extra cellular glycolipids produced by *Candida bombicola* ATCC 22214 when grown in the presence of glucose and fatty acids. These compds. have a disaccharide head group connected to a long-chain hydroxyl-fatty acid by a glycosidic bond. To explore structure-activity of modified SLs, a new family of amino acid-SL derivs. was prepared. Synthesized analogs consist of amino acids linked by amide bonds formed between their α -amino moiety and the carboxyl group of ring-opened SL fatty acids. Their preparation involved the following: (i) hydrolysis of a natural SL mixture with aqueous alkali to give SL free acids, (ii) coupling of free acids to protected amino acids using dicarbodiimide, and (iii) removing amino acid carboxyl protecting groups. These conjugates were evaluated for their antibacterial, anti-HIV, and spermicidal activity. All tested analogs showed antibacterial activity against both gram pos. and gram neg. organisms. Leucine-conjugated SL was most efficient. For example, the min. inhibitory concns. (MIC) for *Moraxella* sp. and *E. coli* were 0.83 and 1.67 mg/mL, resp. Among the alkyl esters of amino acid conjugated SLs, the Et ester of leucine-SLs was most active. Against *Moraxella* sp., *S. sanguinis*, and *M. imperiale*, MIC values are 7.62×10^{-4} , 2.28×10^{-3} and 1.67 mg/mL, resp. All compds. displayed virus-inactivating activity with 50% effective concns. (EC50) below 200 μ g/mL. The EC50 of leucine-SL Et ester was 24.1 μ g/mL, showing that it is more potent than com. spermicide nonoxynol-9 (EC50 \approx 65 μ g/mL).

IT 916601-59-7P 916601-61-1P 916601-64-4P

916601-65-5P 916601-66-6P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(synthesis of amino acid-conjugated sophorolipids)

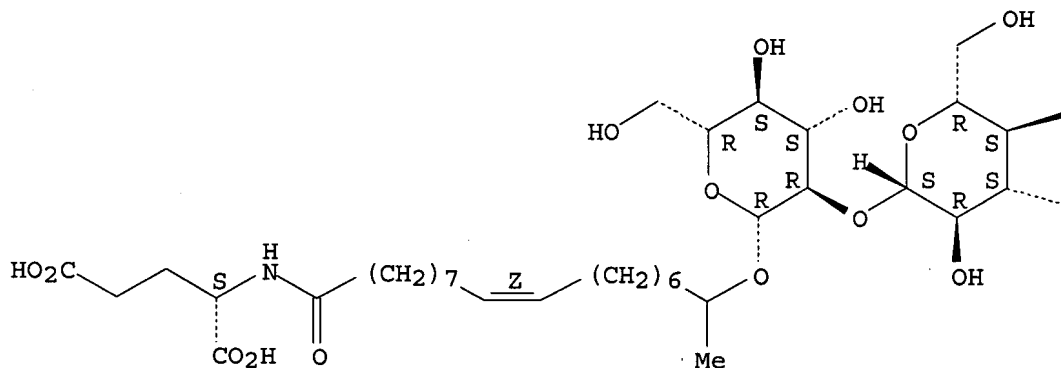
RN 916601-59-7 HCAPLUS

CN L-Glutamic acid, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

OH

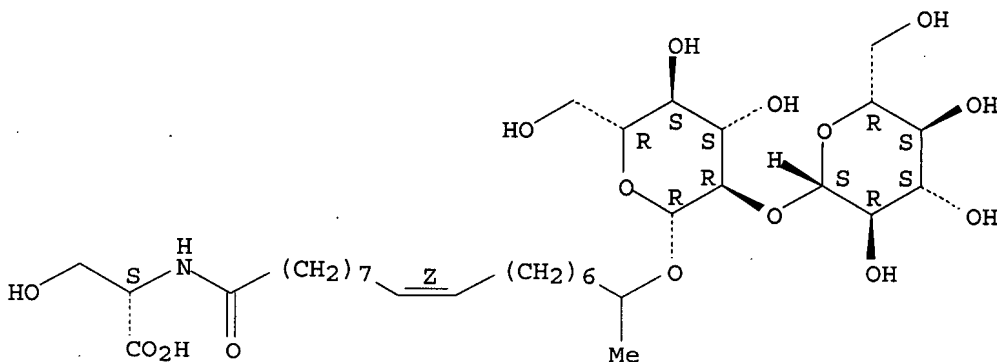
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RN 916601-61-1 HCAPLUS

CN L-Serine, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

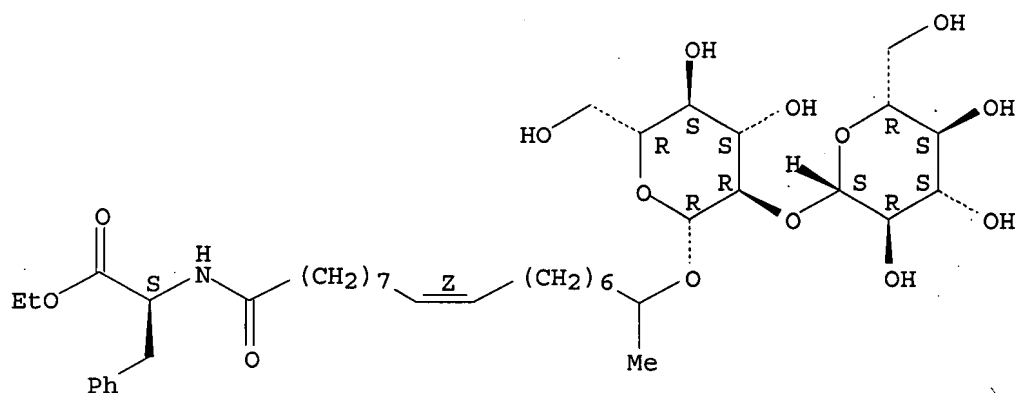
Double bond geometry as shown.



RN 916601-64-4 HCAPLUS

CN L-Phenylalanine, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, ethyl ester (CA INDEX NAME)

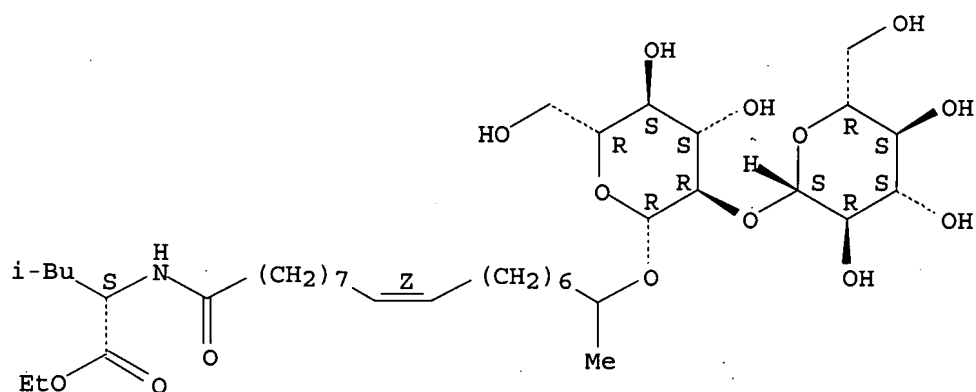
Absolute stereochemistry.
Double bond geometry as shown.



RN 916601-65-5 HCAPLUS

CN L-Leucine, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, ethyl ester (CA INDEX NAME)

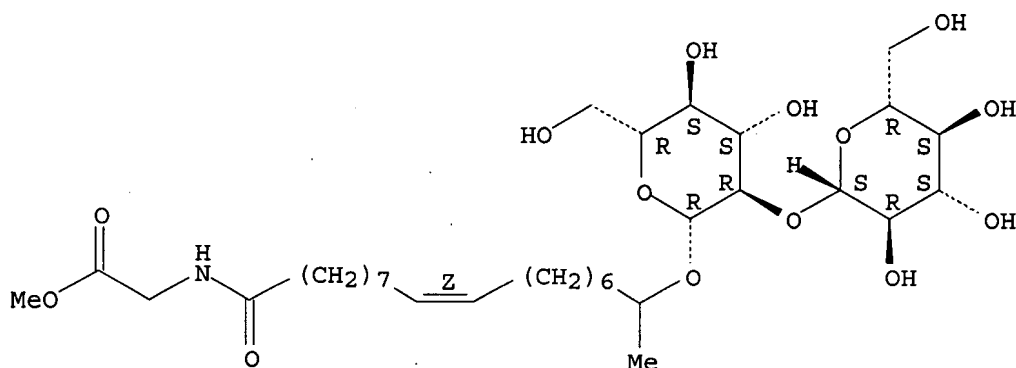
Absolute stereochemistry.
Double bond geometry as shown.



RN 916601-66-6 HCAPLUS

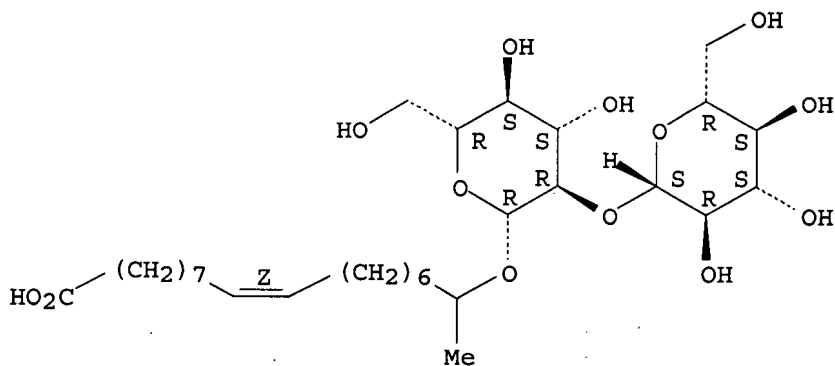
CN Glycine, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



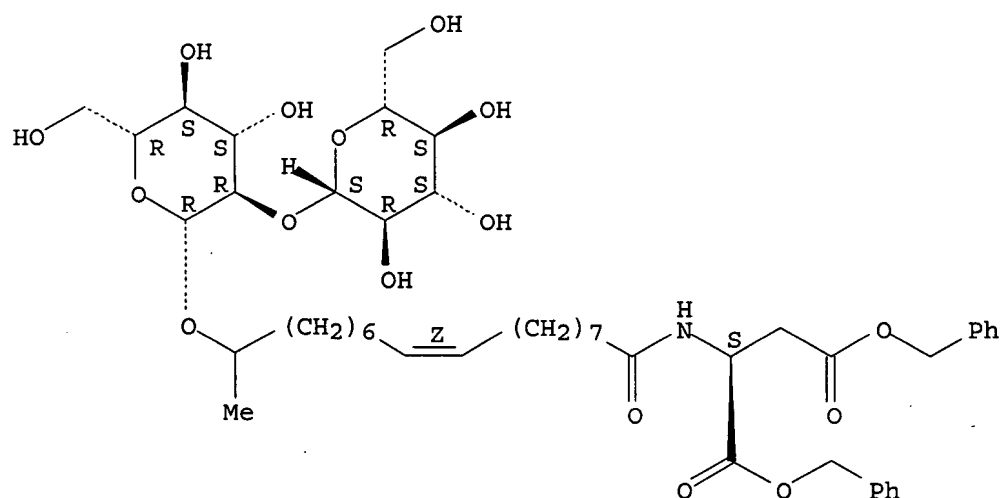
IT 328569-86-4
 RL: RCT (Reactant); RACT.(Reactant or reagent)
 (synthesis of amino acid-conjugated sophorolipids)
 RN 328569-86-4 HCAPLUS
 CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z)- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



IT 916601-54-2P 916601-55-3P 916601-56-4P
 916601-57-5P 916601-58-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (synthesis of amino acid-conjugated sophorolipids)
 RN 916601-54-2 HCAPLUS
 CN L-Aspartic acid, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, 1,4-bis(phenylmethyl) ester
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

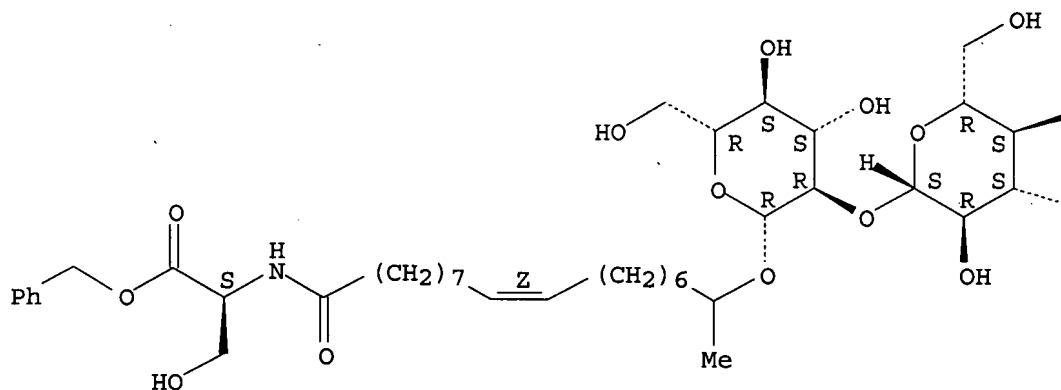


RN 916601-55-3 HCAPLUS

CN L-Serine, N-[(9Z)-17-[(2-O-beta-D-glucopyranosyl-beta-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

OH

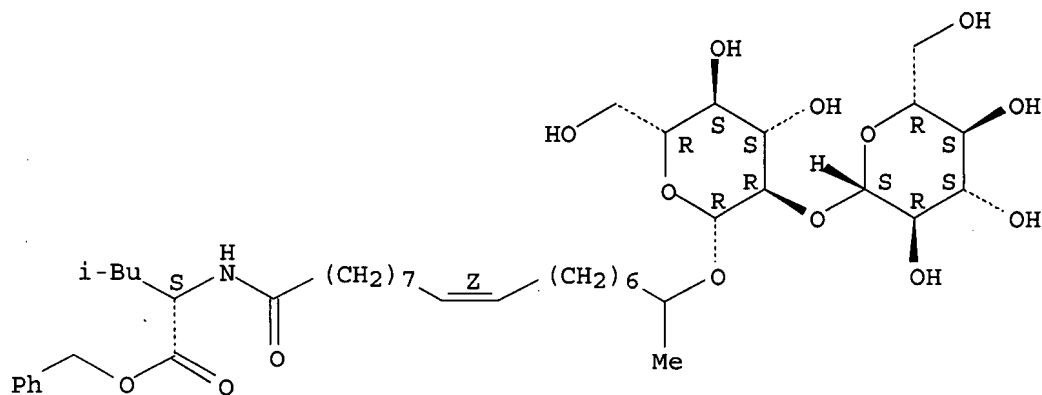
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RN 916601-56-4 HCAPLUS

CN L-Leucine, N-[(9Z)-17-[(2-O-beta-D-glucopyranosyl-beta-D-

glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, phenylmethyl ester (CA
INDEX NAME)

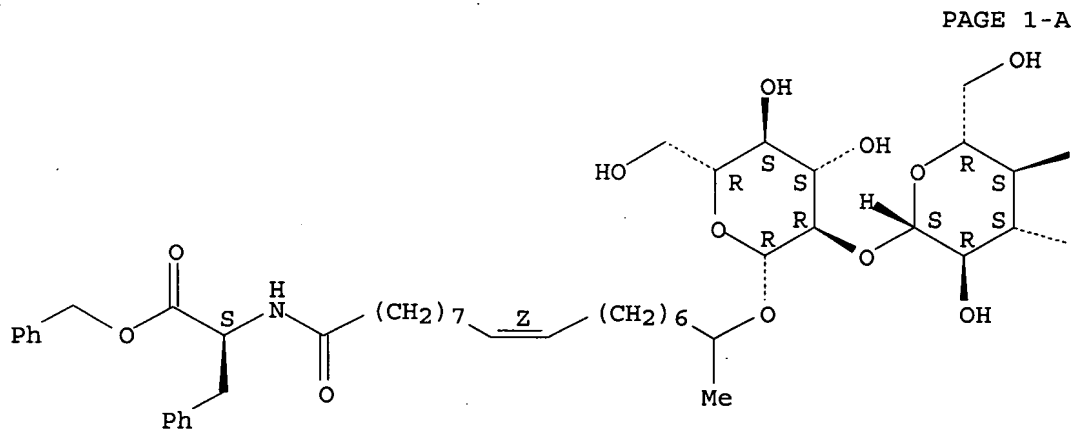
Absolute stereochemistry.
Double bond geometry as shown.



RN 916601-57-5 HCAPLUS

CN L-Phenylalanine, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-1-oxo-9-octadecen-1-yl]-, phenylmethyl ester (CA
INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



PAGE 1-A

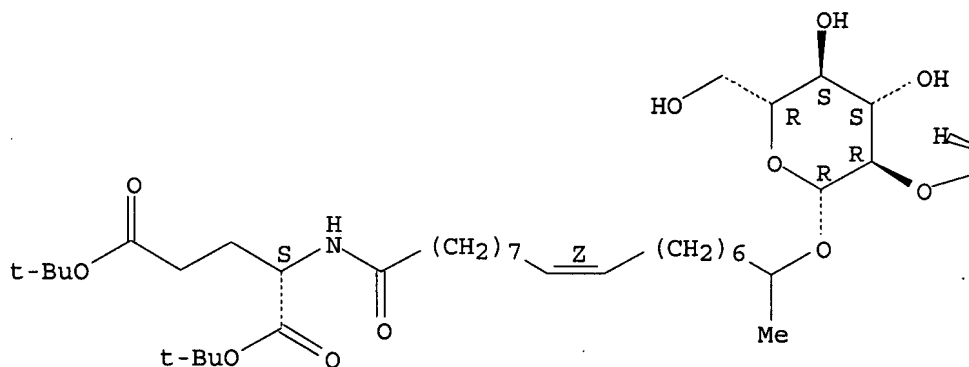
PAGE 1-B



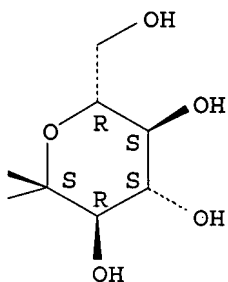
RN 916601-58-6 HCAPLUS
 CN L-Glutamic acid, N-[(9Z)-17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxyl]-1-oxo-9-octadecen-1-yl]-, 1,5-bis(1,1-dimethylethyl) ester (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2005:1093774 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 144:3139
 TITLE: Sophorolipids, microbial glycolipids with anti-human immunodeficiency virus and sperm-immobilizing activities
 AUTHOR(S): Shah, Vishal; Doncel, Gustavo F.; Seyoum, Theodoros; Eaton, Kristin M.; Zalenskaya, Irina; Hagver, Rena; Azim, Abul; Gross, Richard
 CORPORATE SOURCE: NSF Center for Biocatalysis and Bioprocessing of Macromolecules, Six Metrotech Center, Polytechnic University, Brooklyn, NY, 11201, USA
 SOURCE: Antimicrobial Agents and Chemotherapy (2005), 49(10), 4093-4100
 PUBLISHER: CODEN: AMACQ; ISSN: 0066-4804 American Society for Microbiology

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The increased incidence of human immunodeficiency virus (HIV)/AIDS disease in women aged 15 to 49 years has identified the urgent need for a female-controlled, efficacious, and safe vaginal topical microbicide. To meet this challenge, sophorolipid (SL) produced by *Candida bombicola* and its structural analogs have been studied in this report for their spermicidal, anti-HIV, and cytotoxic activities. The sophorolipid diacetate Et ester derivative is the most potent spermicidal and virucidal agent of the series of SLs studied. Its virucidal activity against HIV and sperm-immobilizing activity against human semen are similar to those of nonoxynol-9. However, it also induced enough vaginal cell toxicity to raise concerns about its applicability for long-term microbicial contraception. Its structure-activity relationship has been established for creating new analogs with less cytotoxicity and higher activity.

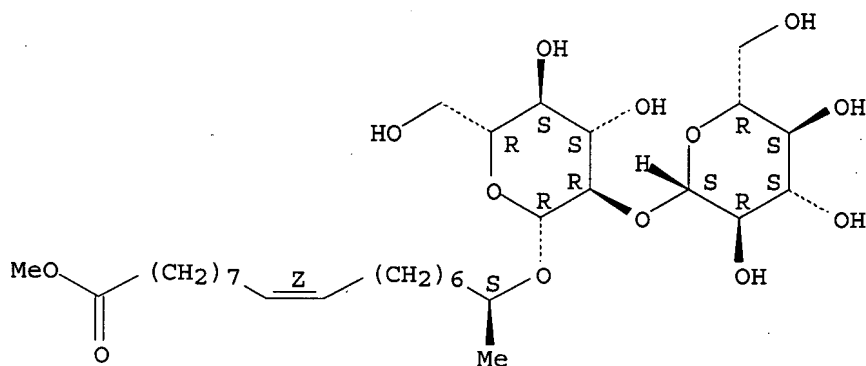
IT 213754-46-2 220608-02-6 220608-07-1
 220608-11-7 585542-23-0 693786-10-6
 777091-27-7 799796-29-5 870150-68-8

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (sophorolipids, microbial glycolipids with anti-human immunodeficiency virus and sperm-immobilizing activities)

RN 213754-46-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

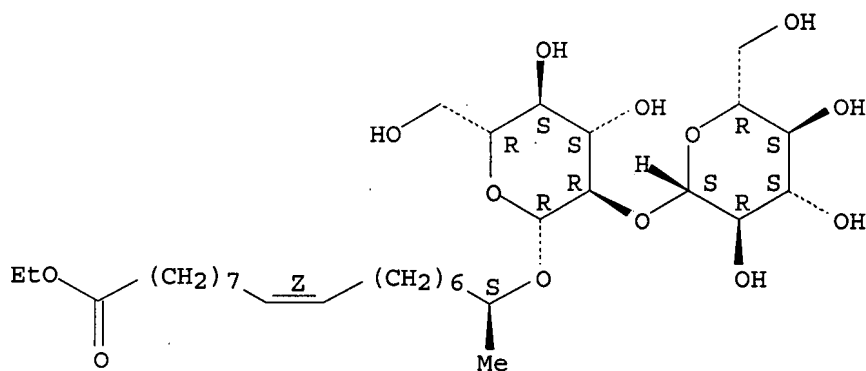
Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 220608-02-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

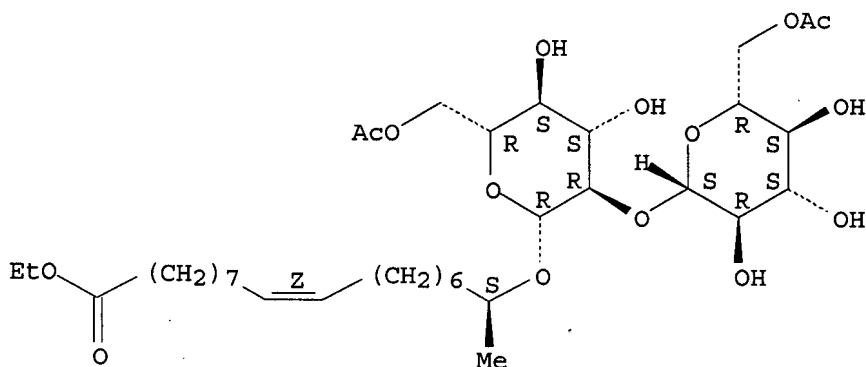
Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 220608-07-1 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

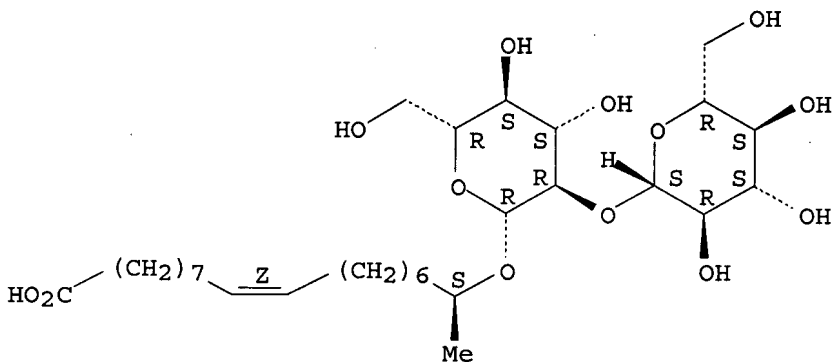
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 220608-11-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[[2-O- β -D-glucopyranosyl- β -D-glucopyranosyl]oxy]-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

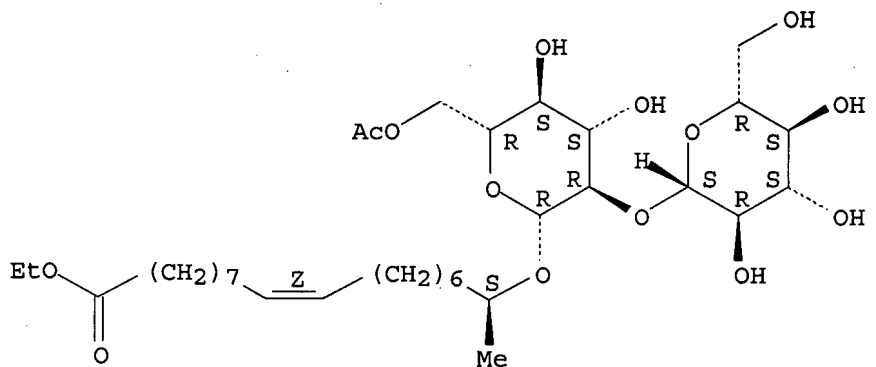


RN 585542-23-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[(6-O-acetyl-2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

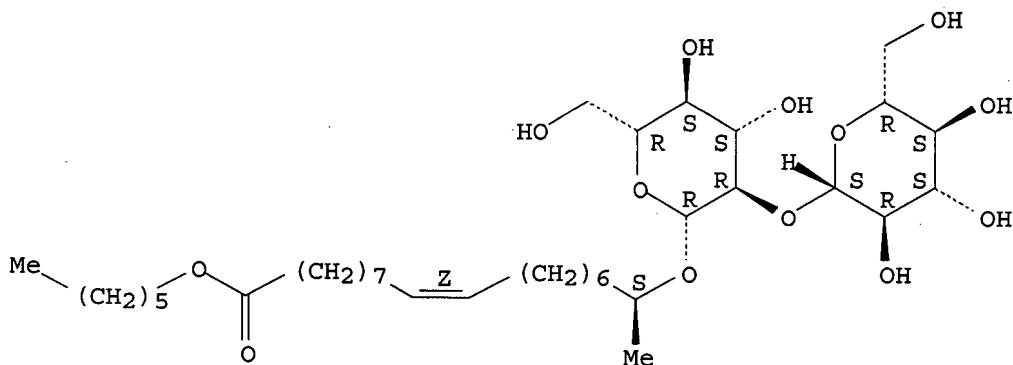


RN 693786-10-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, hexyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

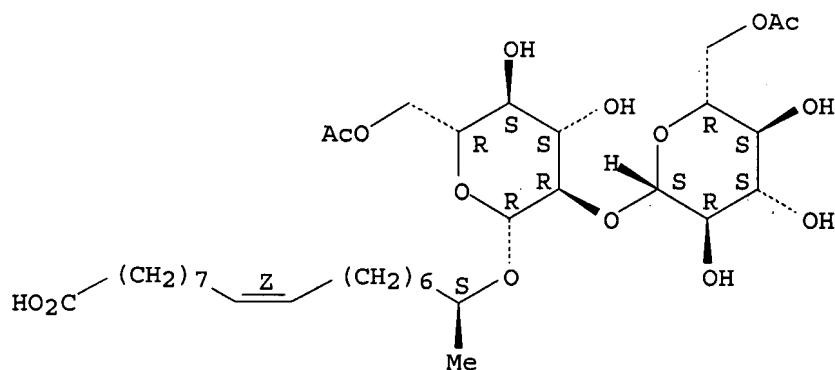


RN 777091-27-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

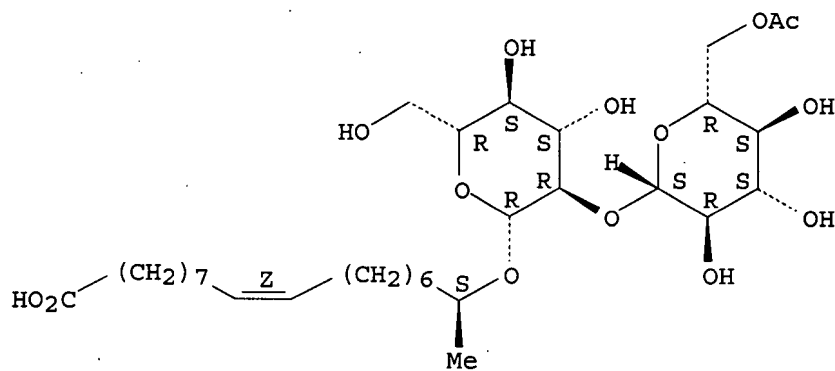


RN 799796-29-5 HCAPLUS

CN 9-Octadecenoic acid, 17-[[2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

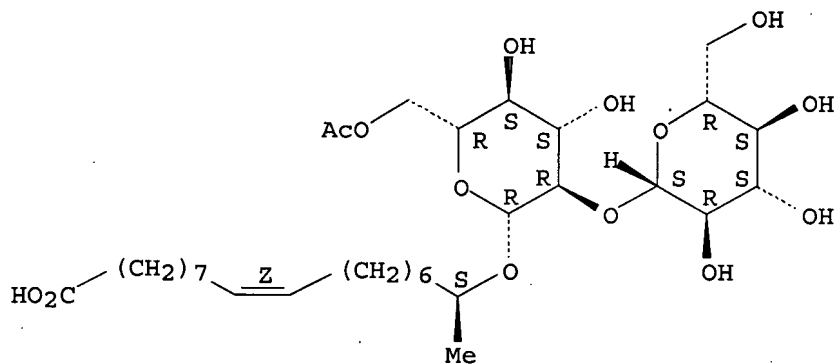


RN 870150-68-8 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O- β -D-glucopyranosyl- β -D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:1038657 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 142:22342
 TITLE: Spermicidal and virucidal properties of various forms
 of sophorolipids produced by Candida bombicola
 INVENTOR(S): Gross, Richard A.; Shah, Vishal; Doncel, Gustavo F.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004242501	A1	20041202	US 2004-804778	20040319
CA 2559808	A1	20050929	CA 2005-2559808	20050318
WO 2005089522	A2	20050929	WO 2005-US9486	20050318
WO 2005089522	A3	20070329		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1750726	A2	20070214	EP 2005-733074	20050318
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
PRIORITY APPLN. INFO.:		US 2003-456208P	P	20030320
		US 2004-804778	A	20040319
		WO 2005-US9486	W	20050318

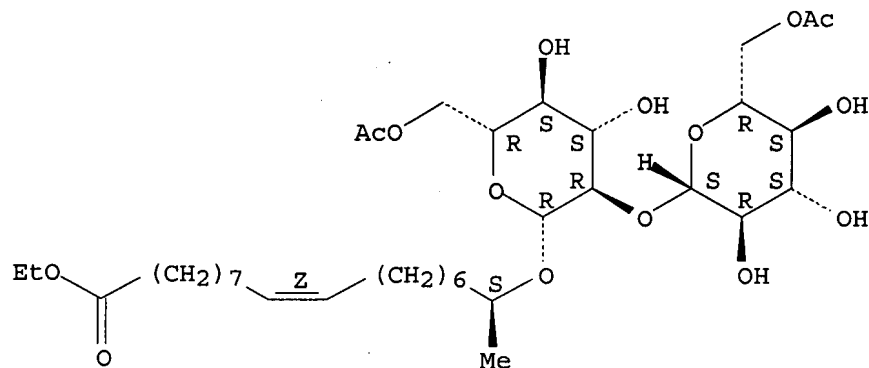
AB A method for producing sophorolipids having spermicidal and/or antiviral properties by synthesizing the sophorolipid by fermentation of Candida bombicola in a fermentation media to form a natural mixture of lactonic sophorolipids compds. and non-lactonic sophorolipids compds. and utilizing the natural mixture as a spermicidal and/or antiviral agent, and/or separating the lactonic sophorolipids from the natural mixture to form a lactonic fraction and mixing all remaining fractions to form a non-lactonic fraction and utilizing the lactonic fraction and/or the non-lactonic fraction as an spermicidal and/or antiviral agent, and sophorolipid compds. for use as spermicidal and/or antiviral agents.

IT 220608-07-1P
 RL: BCP (Biochemical process); IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 (spermicidal and virucidal properties of various forms of sophorolipids produced by Candida bombicola)

RN 220608-07-1 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



IT 777091-27-7P

RL: BMF (Bioindustrial manufacture); CPS (Chemical process); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

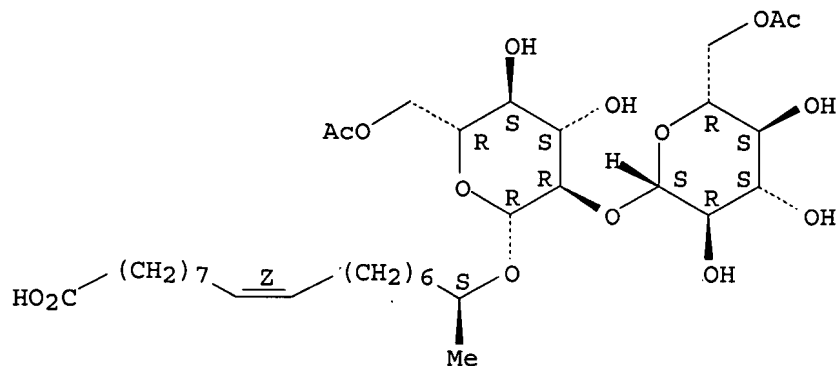
(spermicidal and virucidal properties of various forms of sophorolipids produced by *Candida bombicola*)

RN 777091-27-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 220608-02-6P 220608-11-7P 693786-10-6P

799796-29-5P

RL: BMF (Bioindustrial manufacture); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

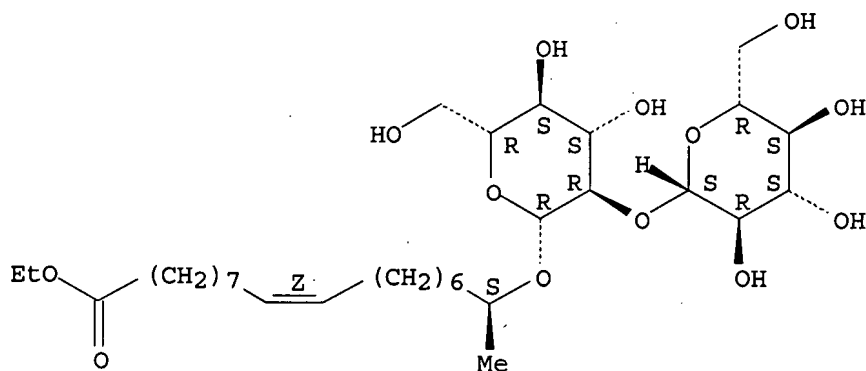
(spermicidal and virucidal properties of various forms of sophorolipids produced by *Candida bombicola*)

RN 220608-02-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

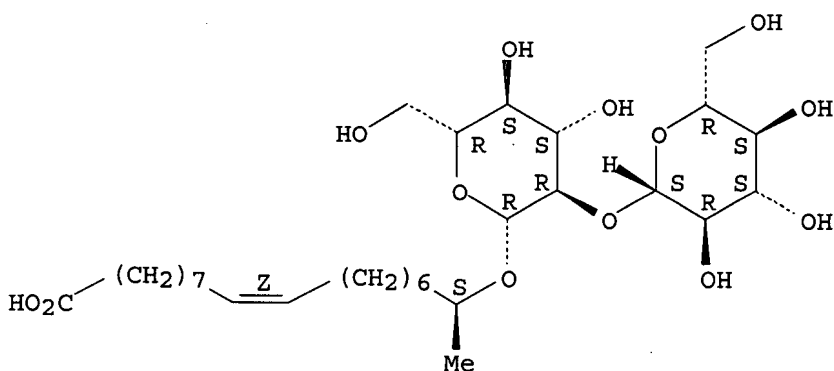


RN 220608-11-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

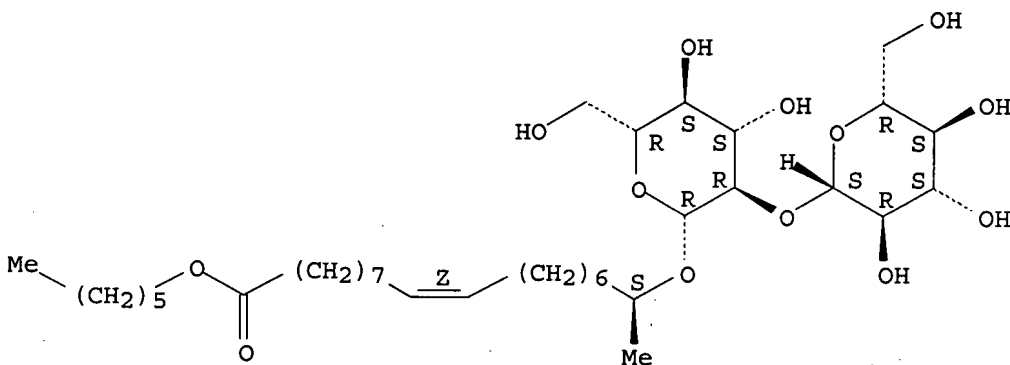


RN 693786-10-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, hexyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

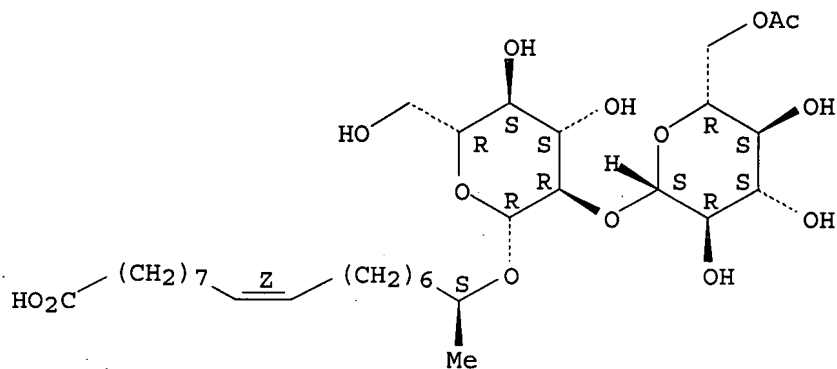
Absolute stereochemistry.

Double bond geometry as shown.



RN 799796-29-5 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



L6 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:430977 HCAPLUS <<LOGINID::20070809>>
 DOCUMENT NUMBER: 141:5877
 TITLE: Antimicrobial properties of various forms of
 sophorolipids
 INVENTOR(S): Gross, Richard A.; Shah, Vishal
 PATENT ASSIGNEE(S): Polytechnic University, USA
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004044216	A1	20040527	WO 2003-US35871	20031106
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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AU 2003299557	A1	20040603	AU 2003-299557	20031106
US 2005164955	A1	20050728	US 2004-20683	20041222
WO 2006069175	A2	20060629	WO 2005-US46426	20051222
WO 2006069175	A3	20060908		
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RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			

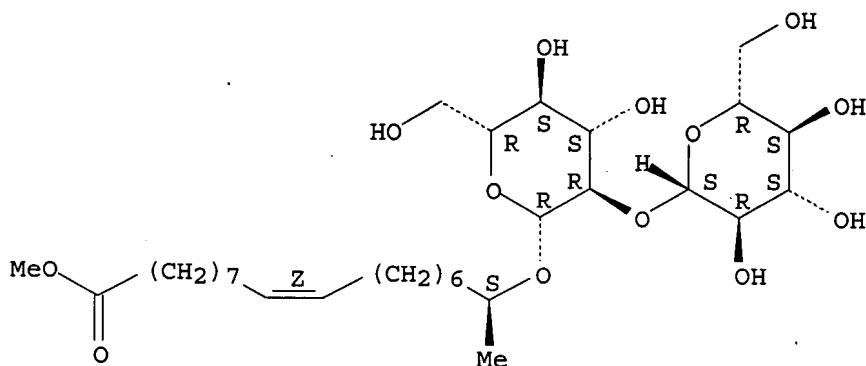
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CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2002-424271P P 20021106
WO 2003-US35871 W 20031106
US 2004-20683 A2 20041222

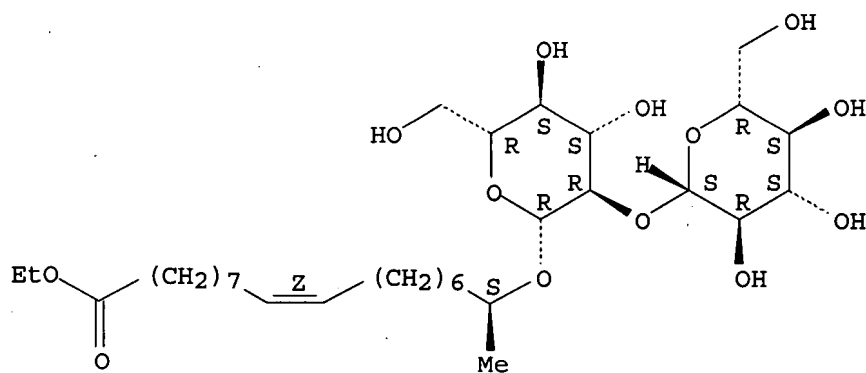
- AB The preparation and use of 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate, lactonic and open ring 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate, Me 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate, Et 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate, hexyl 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate, Et 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate-6''-acetate and Et 17-L-[(2'-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-cis-9-octadecenoate-6',6''-diacetate sophorolipids are antibacterial, antiviral and/or anti-spermicidal agents.
- IT 213754-46-2P 220608-02-6P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); IMF (Industrial manufacture); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(antimicrobial properties of various forms of sophorolipids)
- RN 213754-46-2 HCAPLUS
- CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



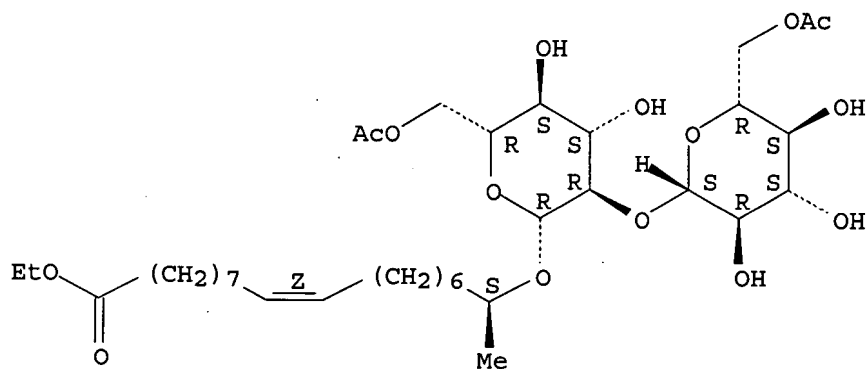
- RN 220608-02-6 HCAPLUS
- CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



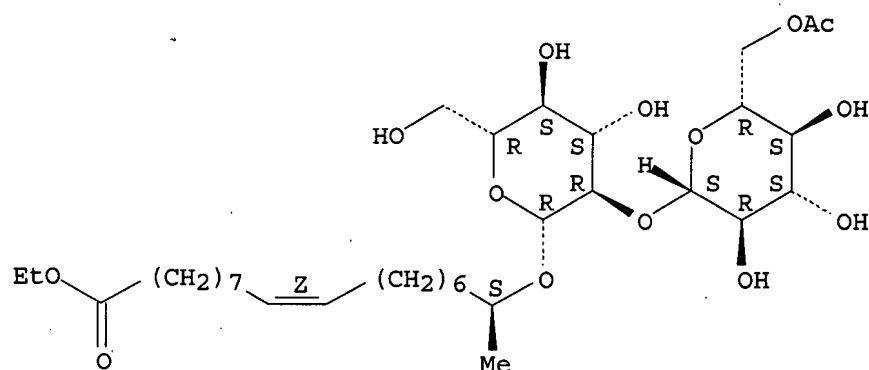
IT 220608-07-1P 585542-24-1P 693786-10-6P
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 IMF (Industrial manufacture); PUR (Purification or recovery); BIOL
 (Biological study); PREP (Preparation)
 (antimicrobial properties of various forms of sophorolipids)
 RN 220608-07-1 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)-
 (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 585542-24-1 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.

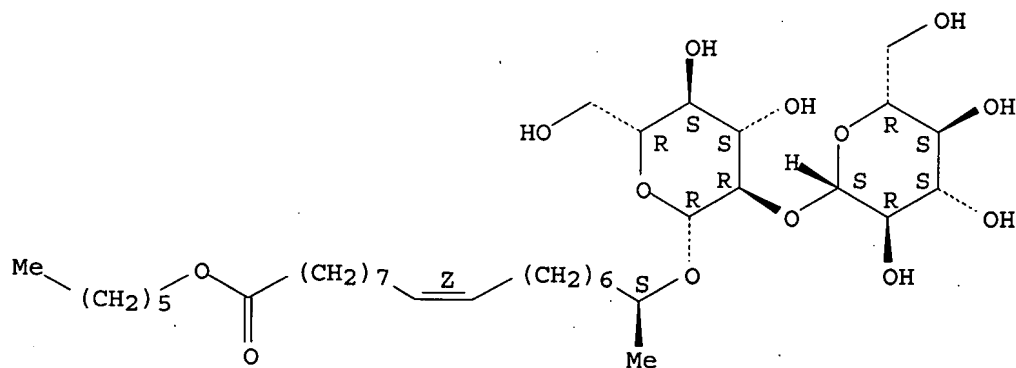


RN 693786-10-6 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, hexyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 220608-11-7P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

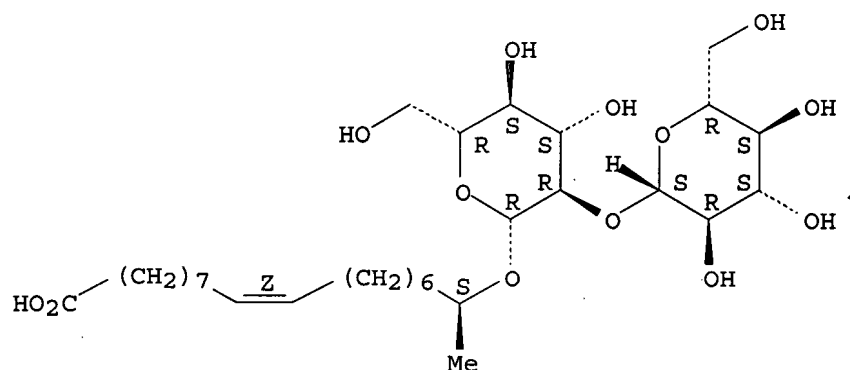
(antimicrobial properties of various forms of sophorolipids)

RN 220608-11-7 HCAPLUS

CN 9-Octadecenoic acid, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 220608-08-2P 585542-23-0P 585542-25-2P
 585542-26-3P 585542-27-4P 585542-28-5P
 585542-29-6P 585542-30-9P 585542-31-0P
 585542-32-1P 585542-33-2P 585542-34-3P
 585542-35-4P 585542-36-5P

RL: BPN (Biosynthetic preparation); IMF (Industrial manufacture); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)

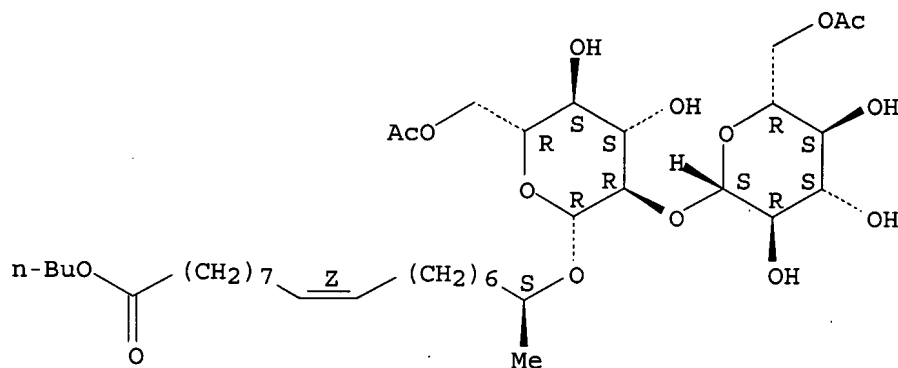
(antimicrobial properties of various forms of sophorolipids)

RN 220608-08-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, butyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

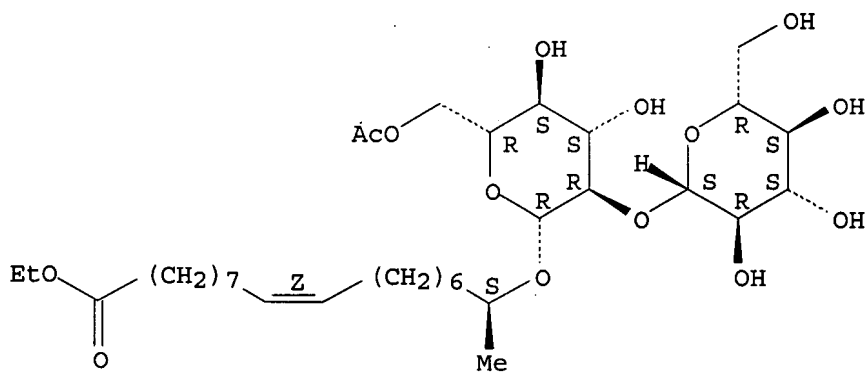


RN 585542-23-0 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O- β -D-glucopyranosyl- β -D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

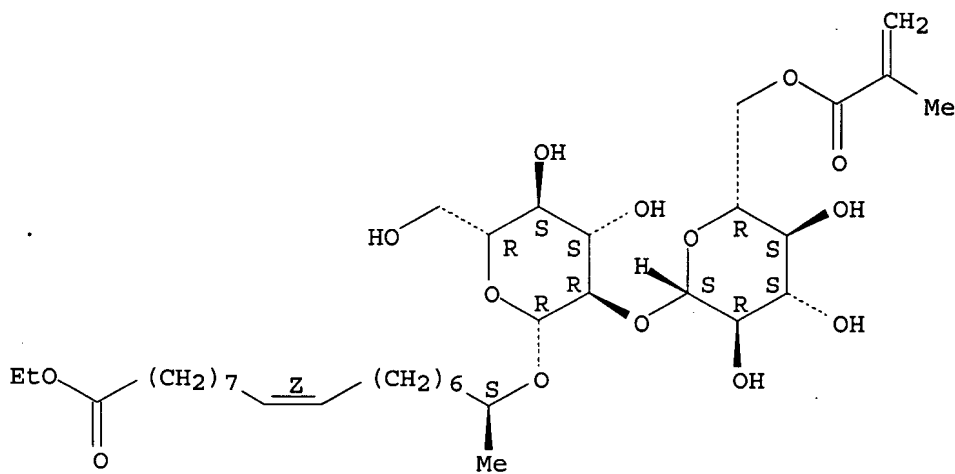
Double bond geometry as shown.



RN 585542-25-2 HCAPLUS

CN 9-Octadecenoic acid, 17-[[2-O-[6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, ethyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

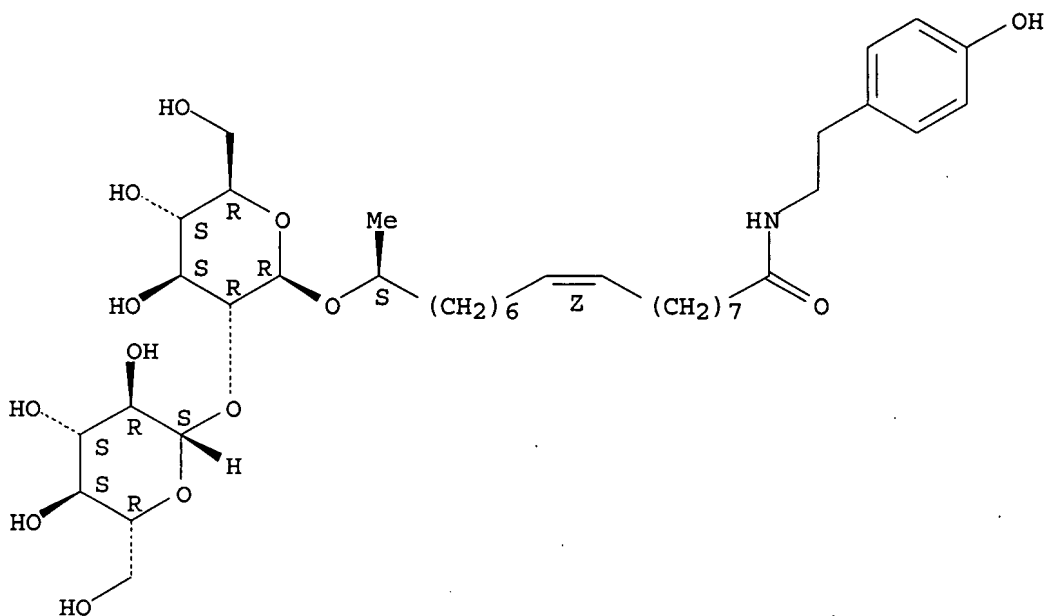
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-26-3 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

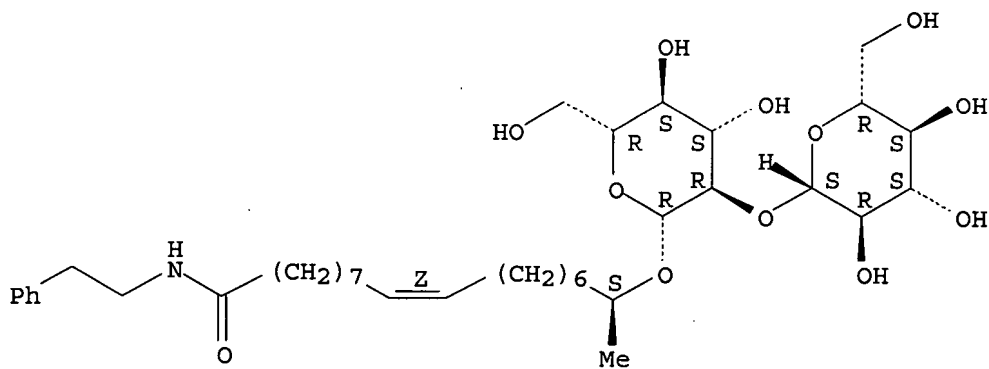


RN 585542-27-4 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-(2-phenylethyl)-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

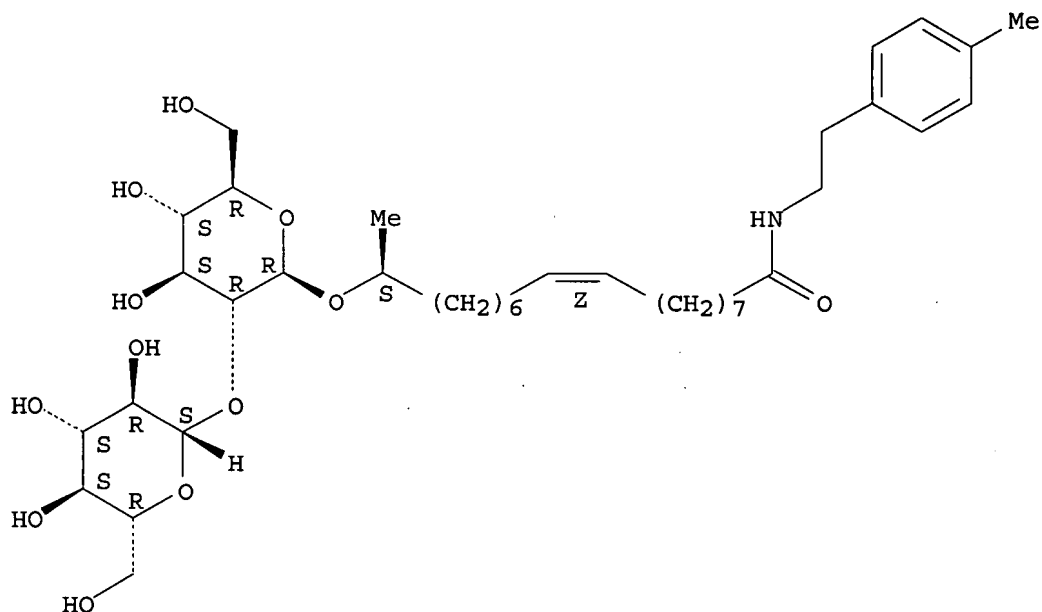


RN 585542-28-5 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-N-[2-(4-methylphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.

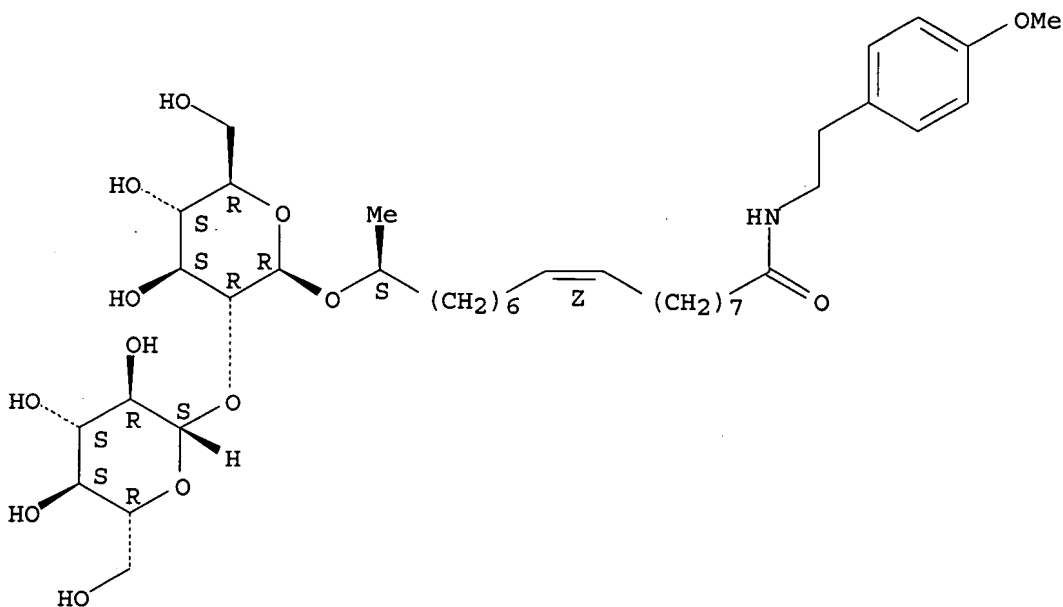


RN 585542-29-6 HCAPLUS

CN 9-Octadecenamide, 17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-N-[2-(4-methoxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

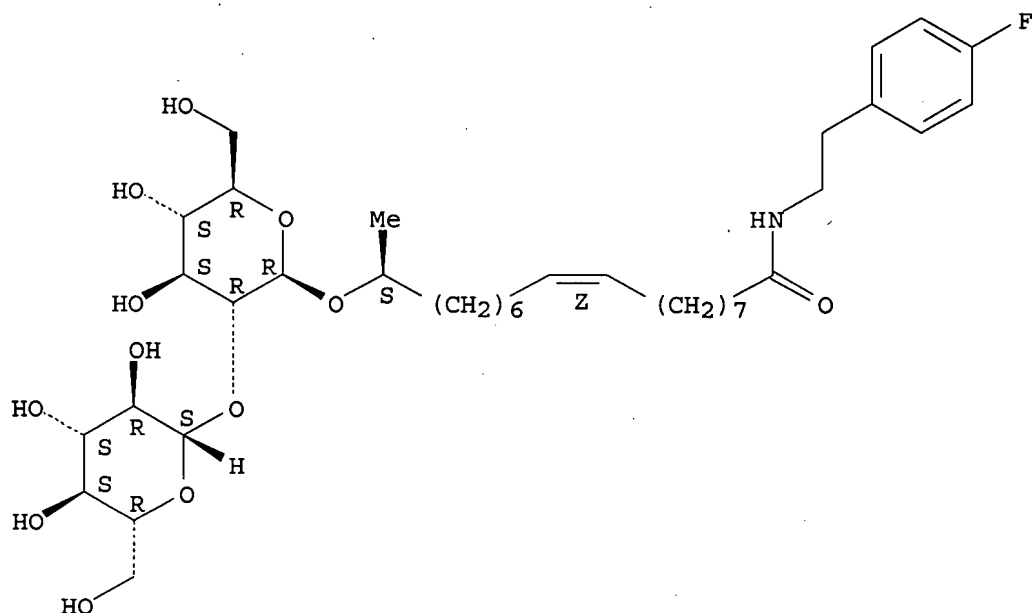
Double bond geometry as shown.



RN 585542-30-9 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-fluorophenyl)ethyl]-17-[(2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

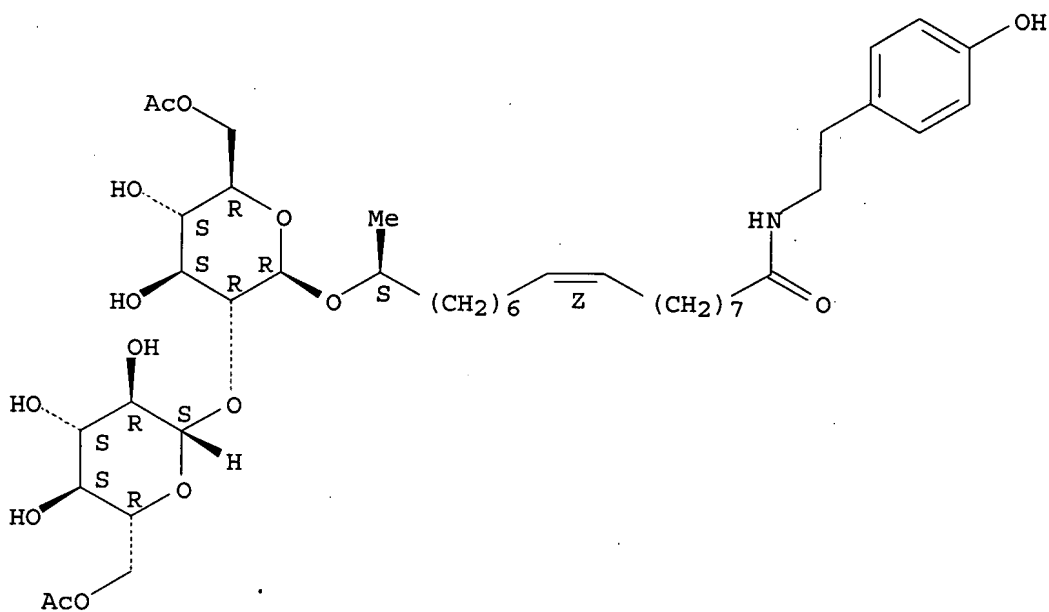
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-31-0 HCAPLUS

CN 9-Octadecenamide, 17-[[6-O-acetyl-2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



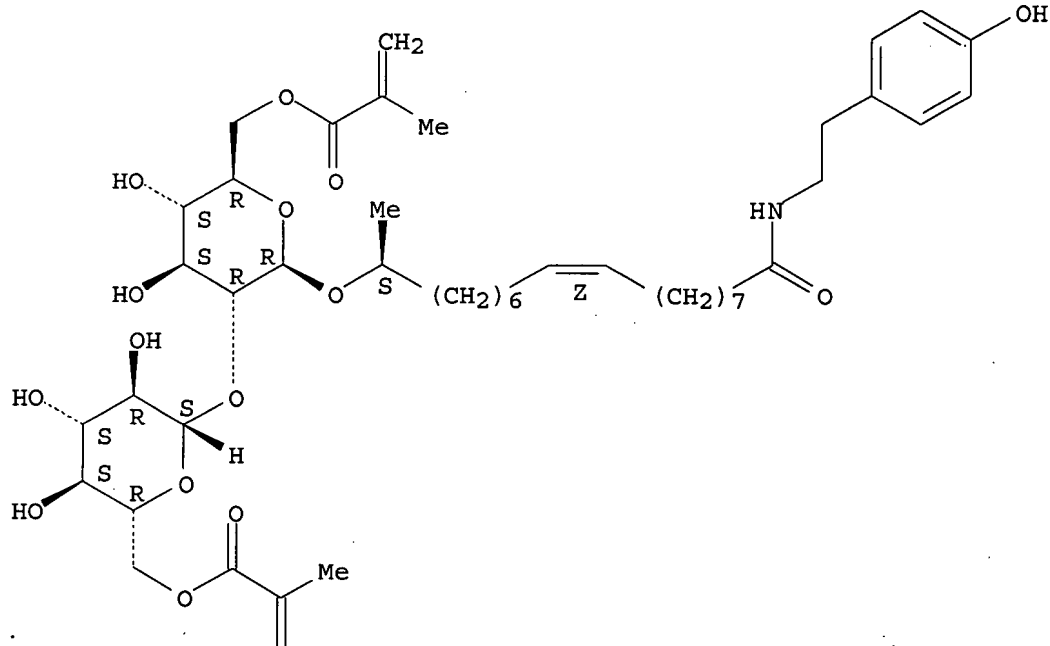
RN 585542-32-1 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-hydroxyphenyl)ethyl]-17-[[6-O-(2-methyl-1-oxo-2-

propenyl)-2-O-[6-O-(2-methyl-1-oxo-2-propenyl)- β -D-glucopyranosyl]- β -D-glucopyranosyl]oxy]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

PAGE 1-A

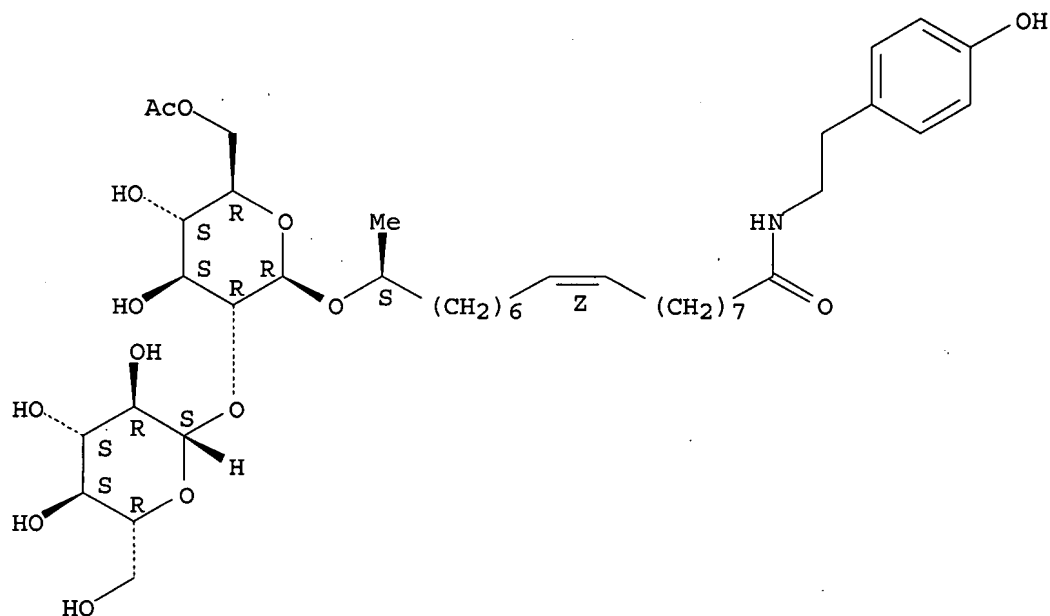


PAGE 2-A



RN 585542-33-2 HCAPLUS
CN 9-Octadecenamide, 17-[(6-O-acetyl-2-O- β -D-glucopyranosyl- β -D-glucopyranosyl)oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

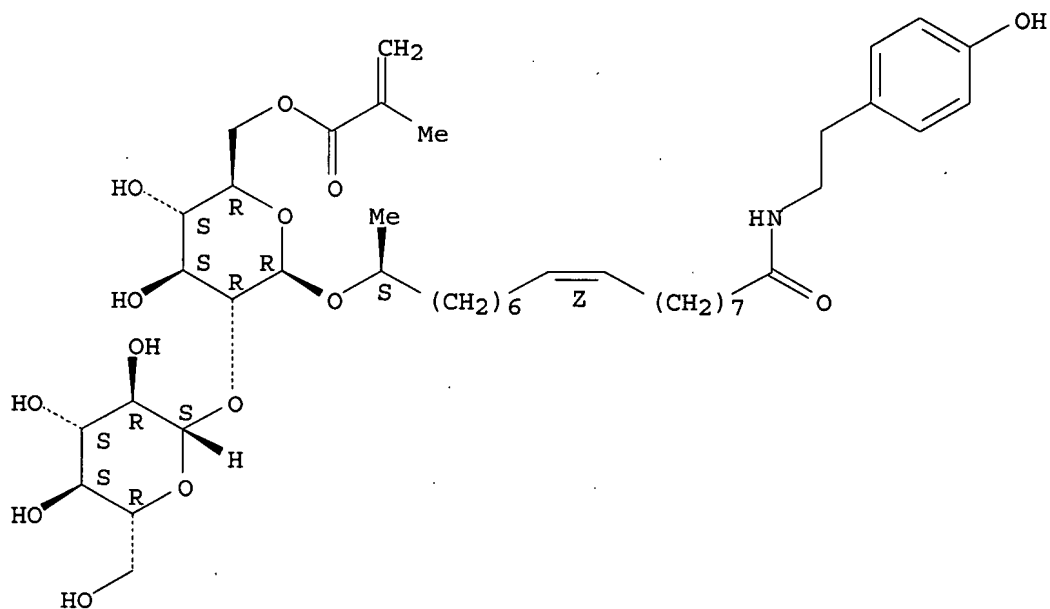


RN 585542-34-3 HCAPLUS

CN 9-Octadecenamide, 17-[[2-O-β-D-glucopyranosyl-6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

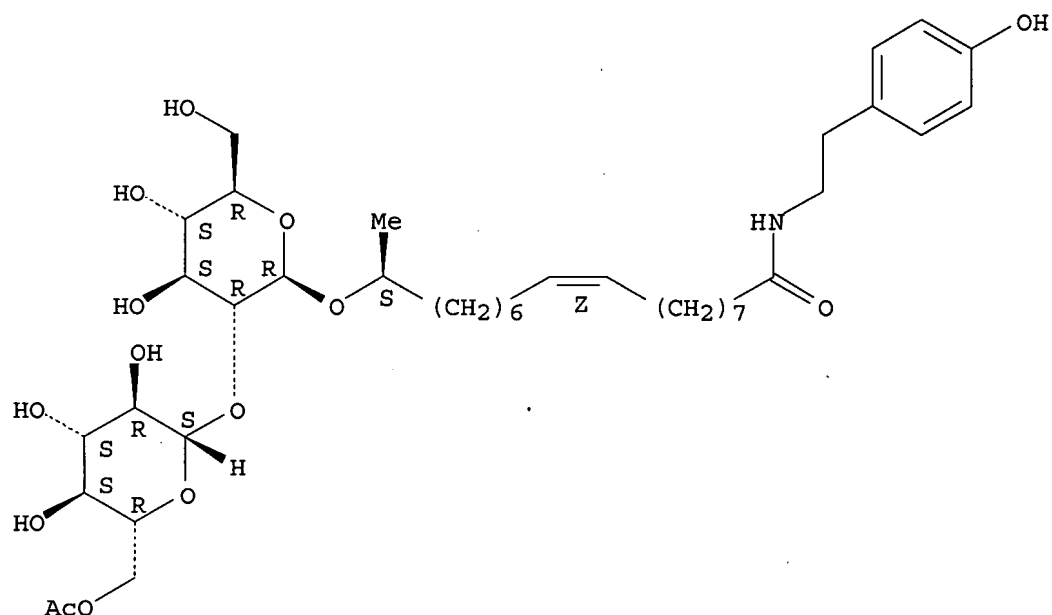
Double bond geometry as shown.



RN 585542-35-4 HCAPLUS

CN 9-Octadecenamide, 17-[[2-O-(6-O-acetyl-β-D-glucopyranosyl)-β-D-glucopyranosyl]oxy]-N-[2-(4-hydroxyphenyl)ethyl]-, (9Z,17S)- (9CI) (CA INDEX NAME)

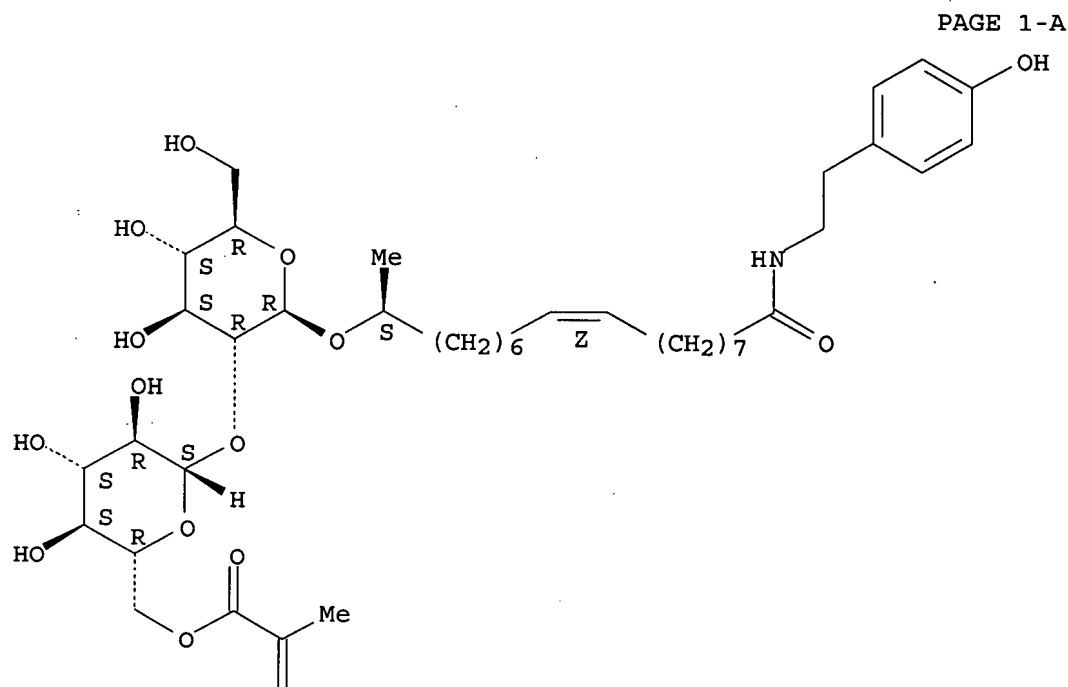
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 585542-36-5 HCAPLUS

CN 9-Octadecenamide, N-[2-(4-hydroxyphenyl)ethyl]-17-[[2-O-[6-O-(2-methyl-1-oxo-2-propenyl)-β-D-glucopyranosyl]oxy]-, (9Z,17S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.

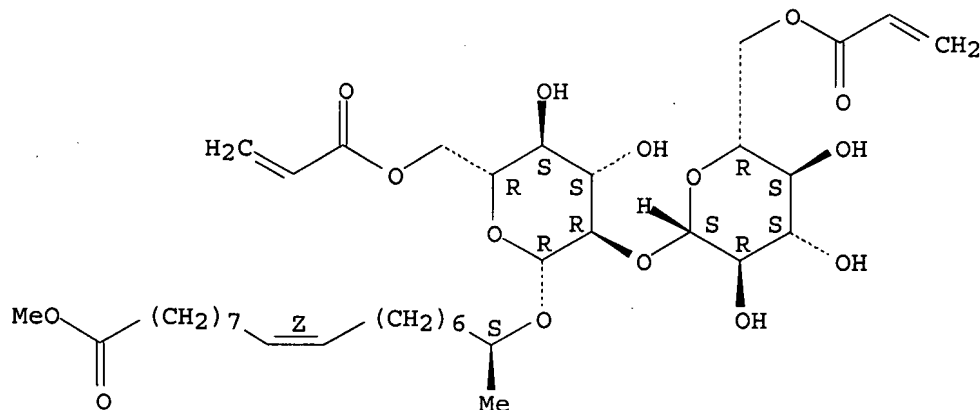


PAGE 2-A



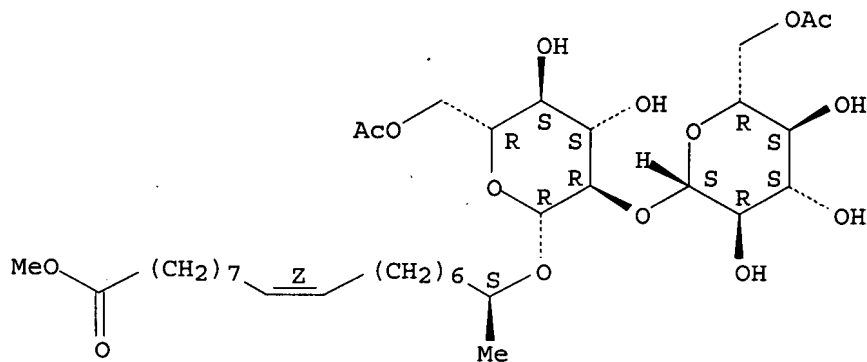
IT 220608-05-9P 220608-06-0P 220608-09-3P
 RL: BPN (Biosynthetic preparation); IMF (Industrial manufacture); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation) (antimicrobial properties of various forms of sophorolipids)
 RN 220608-05-9 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-(1-oxo-2-propenyl)-2-O-[6-O-(1-oxo-2-propenyl)- β -D-glucopyranosyl]- β -D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.



RN 220608-06-0 HCAPLUS
 CN 9-Octadecenoic acid, 17-[[6-O-acetyl-2-O-(6-O-acetyl- β -D-glucopyranosyl)- β -D-glucopyranosyl]oxy]-, methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as shown.

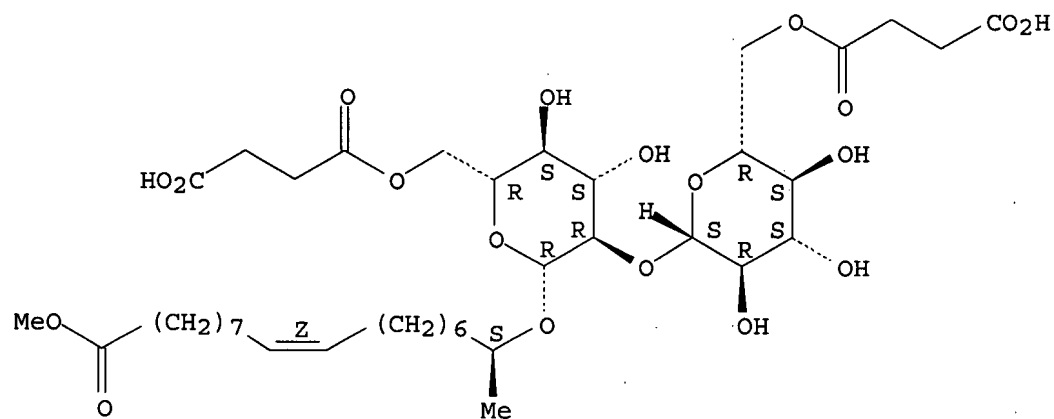


RN 220608-09-3 HCAPLUS

CN 9-Octadecenoic acid, 17-[[6-O-(3-carboxy-1-oxopropyl)-2-O-[6-O-(3-carboxy-1-oxopropyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]oxy]-, 1-methyl ester, (9Z,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as shown.



REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT